

5TH ANNIVERSARY ISSUE

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Suspects in
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Resistance**

**14 Active
Alternatives
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tonyfedfitness | **LiveCaveMan.com**



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Our Mission

Paleo Magazine was founded with the purpose of providing readers with the information they need to live strong, vibrant, healthy lives. We are dedicated to partnering with leaders in the Paleo community to spread the knowledge of ancestral health principles, without the influence of Big Pharma or Big Agriculture.

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sustainabledish



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primalblueprint



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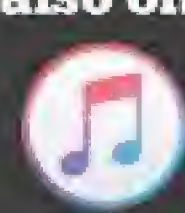
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FEDERICO**

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FRANK STOREY

A tale of determination. p 38

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Oops!

We neglected to give photo credit to
MICHAEL POLITO PHOTOGRAPHY
for his kick-ass photos in
Bodyweight Basics.

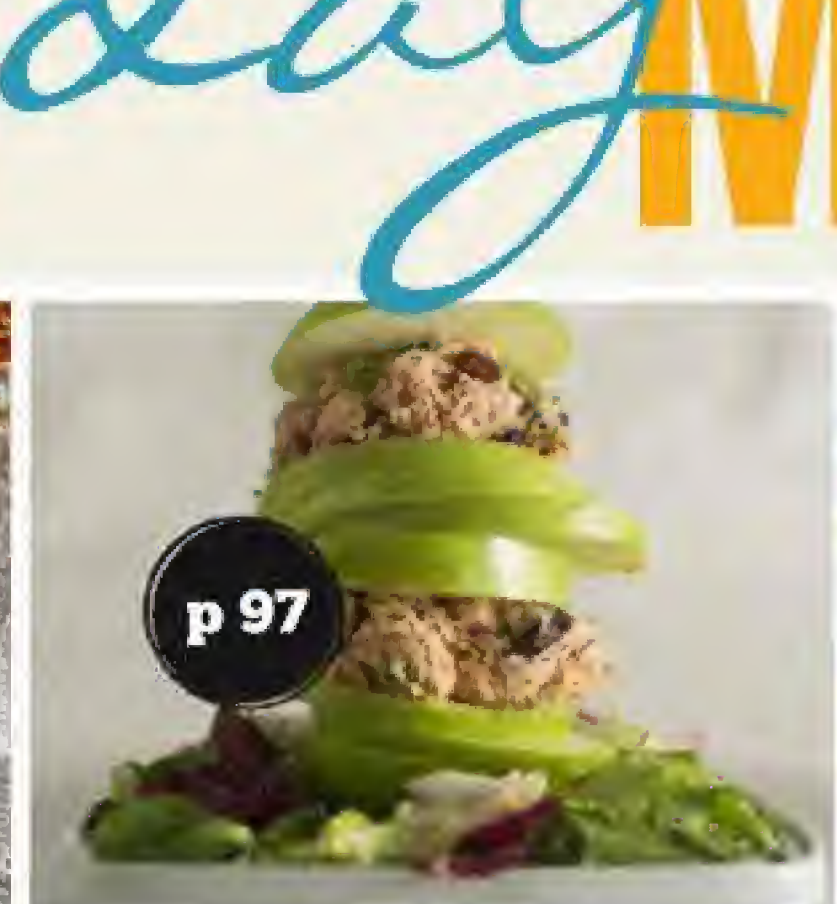
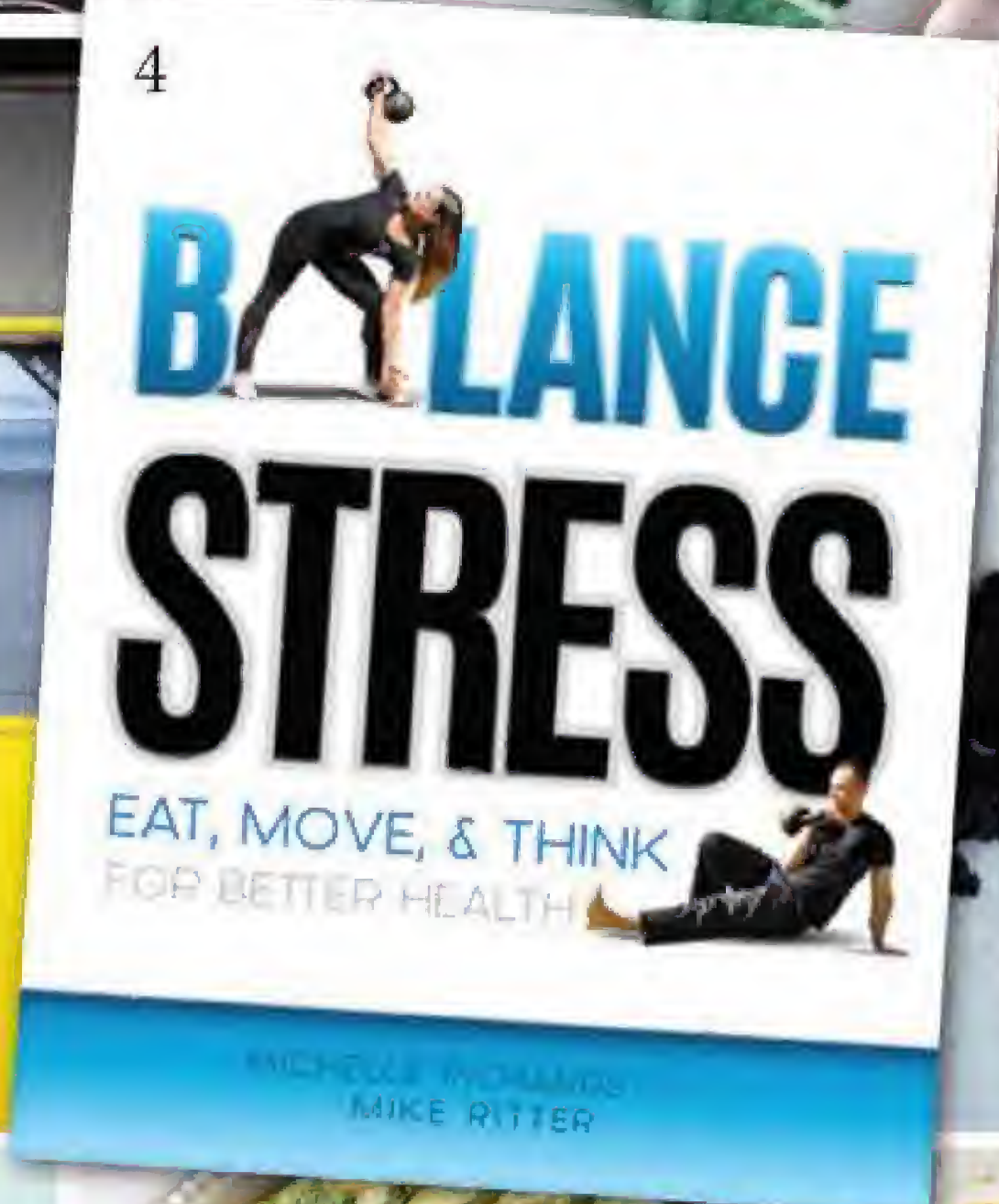
(Dec/Jan 2015
issue p 58)

Check out Michael's work at
MichaelPolitoPhotography.com

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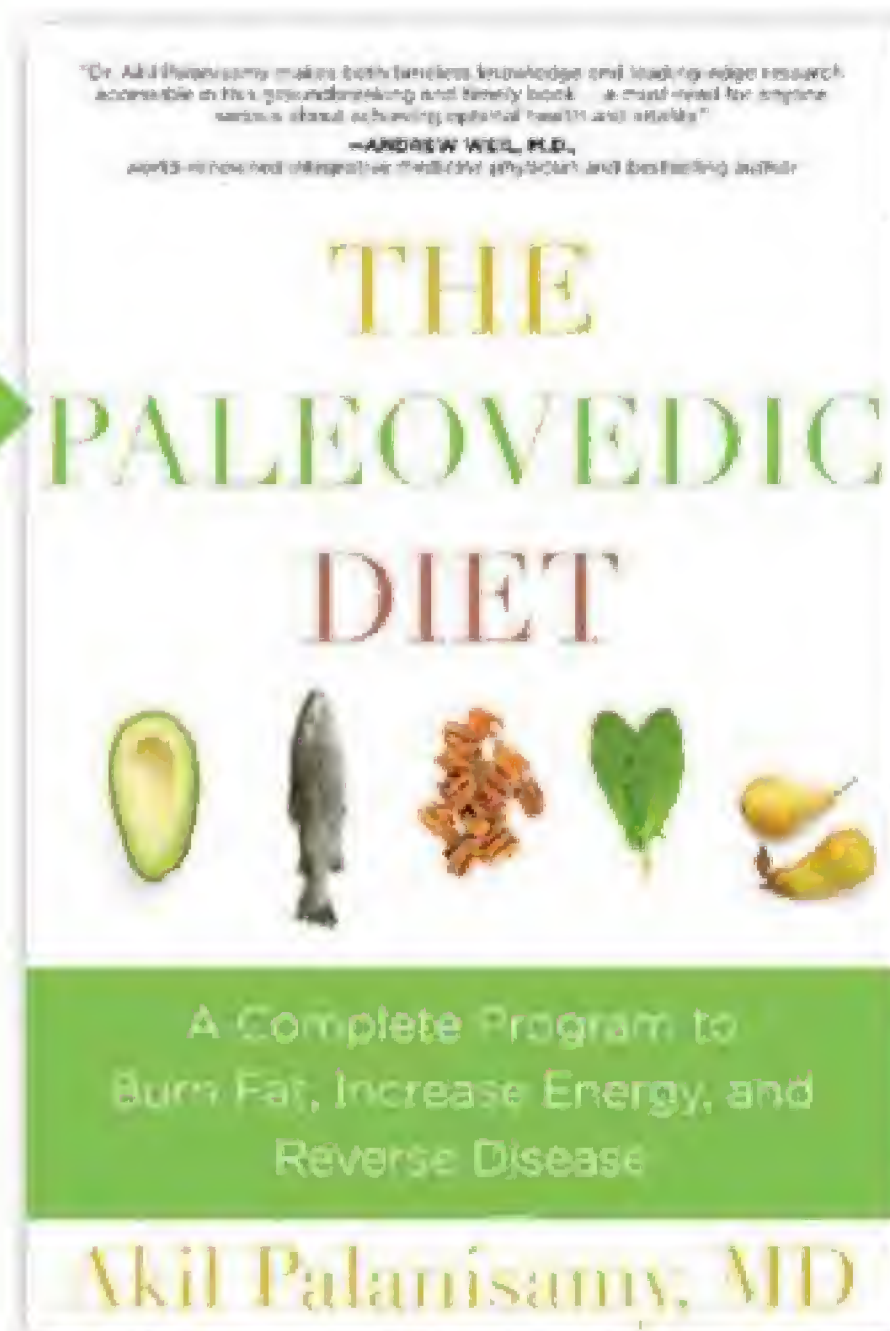
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cause oxidative DNA damage,
and the ones that damage our
mitochondria—like the one
most commonly found in
coffee—those are problems."

—Dave Asprey

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PMR #106

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with food-related
side effects.



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PALEO PMR #102

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The Story of
the Paleo
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**Keith
Mitchell's**
Journey
from the
NFL to
the Yoga Mat

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PMR #104



Smaller intervals of daily activity
REALLY DO MATTER.

EVERY LITTLE BREAK
in our sedentary routine has value.

Spring has sprung! For those of us in the North, we are finally seeing warmer weather, more sun and longer days, and farmers markets are getting ready to launch (if they haven't already). Personally, I can't wait to start hitting my local farmers market and spending way too much time wandering aimlessly down the aisles, acting like a little kid on their first trip to Disney whenever I spot a veggie I haven't seen in a few months. It's an amazing time of year, and certainly a cause for celebration. In this issue, not only are we going to help you celebrate, but we're also going to give you ways to keep your health goals on track, and tips to start preparing for the rapidly approaching summer.

First things first. With the longer days and warmer weather, it's definitely time to start thinking about gardening—what you're going to plant, where you're going to plant it and how you're going to do it. To have the most success, you need to pay particular attention to the soil you're going to plant in. "Soil is the foundation of an organic gardener's success, and you can't grow good crops unless you have good soil—end of story"

(p. 44). The other key piece, of course, is where you're going to actually grow all these tasty veggies. Regardless of where you live—in the city, in the suburbs or on a big ol' piece of land (lucky!)—it is possible to grow the vast majority of the veggies you eat yourself, with surprisingly little time and effort (p. 80).

Not only can growing your own food help your wallet, it can also work as a sort of active meditation—there's something about being outside, moving, breathing fresh air and playing in the dirt—and it's perfect for those of us who find it difficult to carve out the time to squeeze in some traditional sitting meditation each day. For those of you without a green thumb, there are a ton of alternatives to gardening that can get you outside and help you to reap some of the many benefits of meditation. Activities like stand-up paddling, swimming, hiking or simply going for a walk can all provide huge benefits to your general well-being, stress and anxiety levels (p. 72).


Now, I know it can be hard, especially in the cold, dark winter months, to find the

motivation to get into a gym. But now, with the warm temps and bright sun calling to us, it's easier to get back on the exercise train by bringing your workouts outside. Like gardening, paddling or hiking, moving your training outside can provide you with additional benefits: "Having your hands and feet in contact with the ground forces your body to exchange information about where your body is in space" (p. 110). This not only increases body awareness, but it also helps stimulate cognitive brain function. Not to mention the sun feels damn good!

By taking advantage of the warmer weather and getting outside, you can take small steps that will have huge effects on your overall health, not to mention your wallet. Most importantly, remember,

"IN THE SPRING, AT THE END OF THE DAY, YOU SHOULD SMELL LIKE DIRT."

—MARGARET ATWOOD


Cain Credicott
Founder/Editor in Chief




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AMAZING TIME
OF YEAR, AND
CERTAINLY A
CAUSE FOR
CELEBRATION.



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Gardening

with THE PALEOISTA

HUNTER-GATHERER. IT'S A TERM ALL OF US KNOW QUITE WELL. After all, it's what the whole Paleo diet is based on. But how many of us are actually doing the hunting and gathering ourselves?

Admittedly, I've done none of the former, and can only honestly say I've done some of the latter if we consider "gathering" local, organic produce from the farmers market. And while I have yet to learn to shoot a rifle or how to fish, or to go on a hunting expedition, last year I felt it was long past due for me to at least start my own garden.

With only 6 percent of people in the U.S. being legitimate hunters, most of us are clearly not showing signs of being able to kill our own food. Is it because we've gotten to the point where our food is actually primarily man-made—nearly two-thirds of the food eaten by the average American family comes from a box, can or mix—and far too easy to procure? Or is it because we're choosing to remain blind to the conditions in which our meats, fish and poultry are sourced by supporting factory farming?

My hope is that at the very least, we're becoming more mindful of sourcing, and indeed, by supporting our local vendors of grass-fed meats, wild fish, and pasture-raised pork and poultry, we're making an incredibly positive impact. Arguably, one needn't actually become a hunter themselves, so long as they procure their protein sources conscientiously and communally by frequenting the farmers market or any of the growing number of online vendors that offer humanely raised animals.

But when we're talking produce, it's a whole different ball game. And on that front, surprisingly, we're actually in great shape, nationwide. According to a new report by the National Gardening Association, food gardening in the U.S. is at the highest levels in over a decade. Currently, 35 percent of all households in America are growing food at home or in a community garden, up 17 percentage points in five years, which is the largest increase in participation seen among younger households in nearly 10 years! And with community gardens also on the rise, and the next generation of millennials playing a huge role in that sector, particularly in urban areas, things truly are looking up.

Gardening at home and being able to forage in your own backyard (or rooftop garden or window box) is something anyone can do, whether they live in the countryside or an urban jungle. Not only is it more cost-effective to grow your own food,

but you can control exactly what you're getting, from soil to seeds and natural remedies to keep pests at bay. Even the most skeptical produce shopper can rest assured that they're getting nothing but the freshest, most natural food if it comes from their own backyard!

When I started my garden, I wanted to do it the right way, so I sought out a teacher. Thankfully, I found a biodynamic gardening expert not 10 minutes from my home. Originally, I thought I wanted an organic garden, and that I could just use the space in my yard. Unfortunately, it wasn't that simple.

First, there was soil testing. We had to make sure the pH was correct, that the soil organisms were in balance and that there was no contamination. When we got our results a few weeks later, we learned that the earth that was tested was actually high in aluminum. Interestingly, as my teacher explained, the concern was not solely that the aluminum would be absorbed into the food, but that when high aluminum levels disturb the plant, it develops an inability to absorb other nutrients and water. In addition, moderate amounts of lead were detected, which would also be concerning. So, the solution was to create some raised beds, fill them with the highest-quality soil and then get started.

Based on the time of year and the area I live in, we chose the veggies and herbs most suited to the environment. I learned how a spray made of white clover tea can ward off pests. I learned how to check for larvae and how to gently roll them off the leaves with my finger if they appeared. Watering was an art, as well, as it needed to be done gently and not too often.

Just a few months later, I have four beds filled with parsley, oregano, rosemary, lettuces, spinach, kale, chard, broccoli and cauliflower, which is going to serve me again and again and again. Am I now a self-sufficient forager living off the grid? No, but it's a step in the right direction—and the more of us who can begin doing the same, the better.

Now, go get your garden groove on! 🌱

Gardening at home and being able to forage in your own backyard (or rooftop garden or window box) is something anyone can do, whether they live in the countryside or an urban jungle.

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Gut Microbiota



Role of the GUT MICROBIOTA in defining human health

Fujimura KE, Slusher NA, Cabana MD, Lynch SV

Expert Review of Anti-infective Therapy. 8.4 (2010): 435-454.
DOI:10.1586/eri.10.14

The gastrointestinal tract houses an unimaginably large number of microorganisms—an estimated **100 TRILLION!**

This community of organisms is richly diverse, representing **1,000 DISTINCT BACTERIAL SPECIES.**

The number and type of gut microbes has a significant impact on body functioning, health and disease. For example:

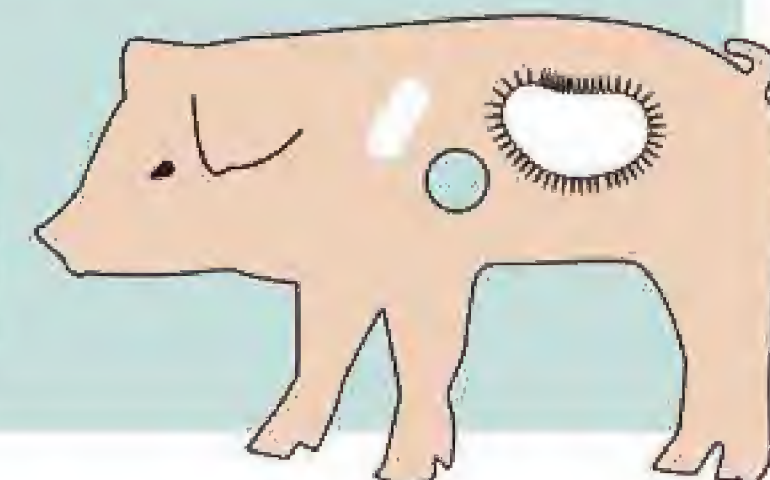
The ratio of the bacterial strains *Firmicutes* to *Bacteroidetes* is

10X GREATER IN THE GUTS OF OBESE INDIVIDUALS compared to those of **LEAN INDIVIDUALS**

Diet strongly influences this distribution, as well: A high-fat/high-sugar Western diet changes the microbiome to promote the growth of bacterial strains in the *Firmicutes* family associated with increased body fat and upregulation of metabolic pathways involved in the metabolism of simple sugars. An obese individual has a ratio of *Firmicutes* to *Bacteroidetes* of 35 to 1, compared to a 3-to-1 ratio for lean individuals.

Firmicutes extract more energy from food and lead to greater fat storage.

The infant gut microbiome is impacted by exposure to microbes while in utero, and this has implications for postnatal immune responses. Children born to women who were exposed either to farm animals or household pets during pregnancy are less likely to develop allergies. It is hypothesized that exposure to the diversity of microbes in these environments shapes the child's immune system in a beneficial way. In contrast, children born to women who took antibiotics while pregnant are at greater risk for childhood asthma.



ALLERGIES AND ASTHMA

"are regarded as a failure in the development of a balanced immune response" resulting from lack of early exposure to microbes. A number of lifestyle choices contribute to this missed opportunity. An infant will have less exposure to microbes if delivered by caesarean section rather than vaginal birth, if fed formula rather than breast milk, if hospitalized and if given antibiotics. Children delivered by caesarean section have a 20 percent increase in the development of asthma and allergy compared with those delivered vaginally.

"Aberrations in the adult gut microbiota have also been associated with a number of diseases and disorders," including allergies, colon cancer, obesity, type 1 and type 2 diabetes, rheumatoid arthritis, Crohn's disease, ulcerative colitis, gastroenteritis and even HIV.

Role of the GUT MICROBIOTA in health and chronic gastrointestinal disease: UNDERSTANDING A HIDDEN METABOLIC ORGAN

Guinane CM,
Cotter PD

Therapeutic Advances in Gastroenterology. 6.4
(2013): 295–308. DOI: 10.1177/1756283X13482996

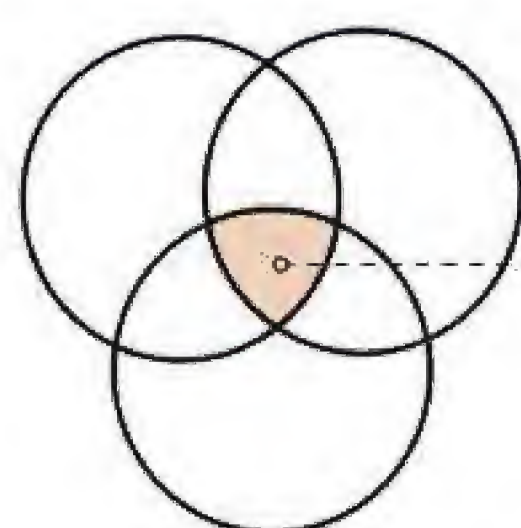
The human intestinal tract is home to a vast microbial community. “This community is commonly referred to as our hidden metabolic ‘organ’ due to their immense impact on human well-being, including host metabolism, physiology, nutrition and immune function.”

Disruption in this ecosystem—unhealthy shifts in the number and/or types of microbes in the gut, also called “gut dysbiosis”—can lead to diseases, especially those associated with inflammation and with the immune system.

New measurement tools are being developed and used in research studies to better understand the gut microbiome.

One study sequenced the fecal DNA of

**HEALTHY INDIVIDUALS, OBESE INDIVIDUALS AND
THOSE WITH INFLAMMATORY BOWEL DISEASE**



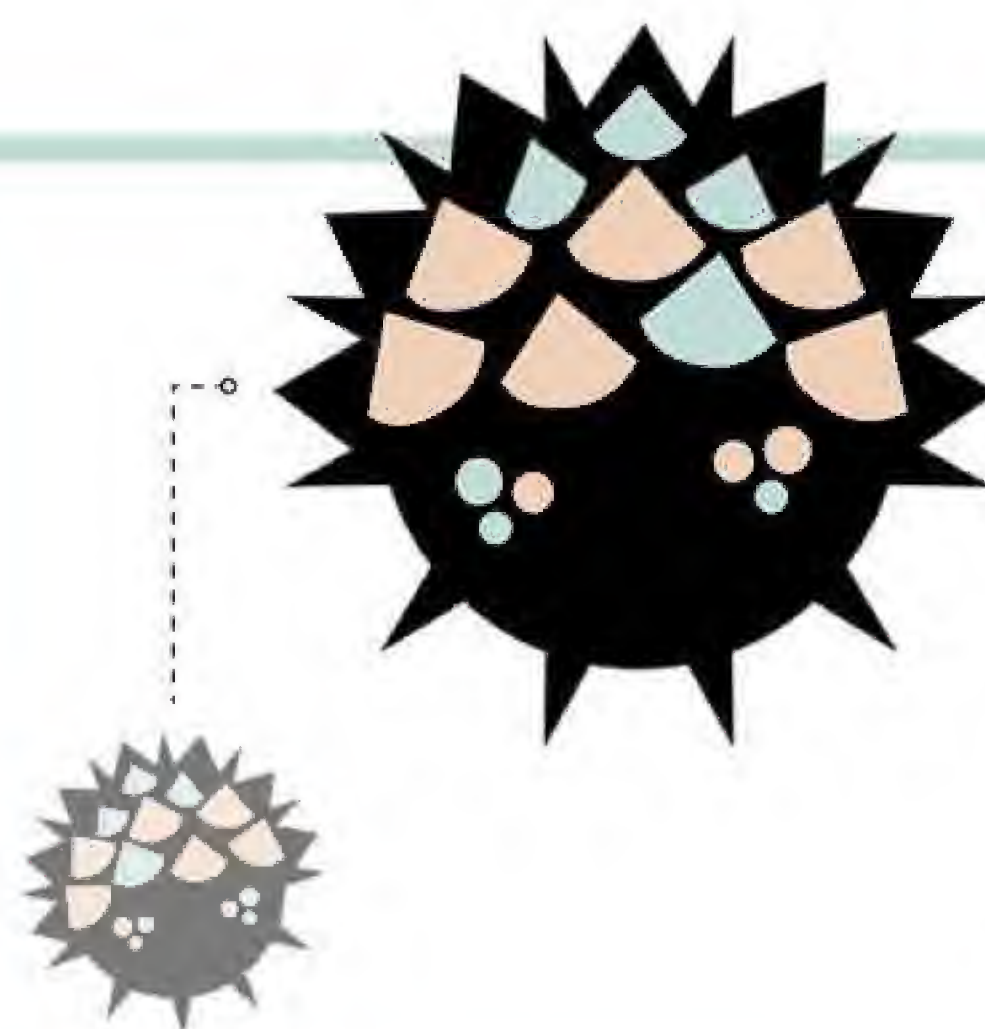
and found that only
**40% OF THE
GASTROINTESTINAL
GENES WERE SHARED**
across all three groups.

99% of the
genes were of
bacterial origin.

Gut dysbiosis contributes to inflammatory bowel disease (IBD) in part by “facilitating adhesion of pathogens to the bowel wall.” Individuals with IBD have a shift in the proportion of bacterial strains normally found in a healthy gut, including an increase in the proportion of *Firmicutes* bacteria and a significant decrease in *Bifidobacterium*.



The reduced diversity of gut bacteria found in individuals with IBD contributes to the **INTESTINAL INFLAMMATION** characteristic of the disease.



Chronic inflammation is a risk factor for carcinogenesis, and it’s been proposed that **INTESTINAL INFLAMMATION MAY WORSEN EXISTING COLON CANCER** by allowing gut microbes to “enter barrier-defective colonic tumours, trigger inflammation through a host immune response and, in turn, increase tumour growth.”

Because gut health appears to play such a significant role in overall human health, a number of strategies for enhancing the health of the microbiome are being considered as treatment options for chronic disease, including therapeutic use of:

PREBIOTICS
(which feed
beneficial gut
bacteria)

PROBIOTICS
(beneficial bacteria
themselves)

**FECAL
TRANSPLANTS**
(which are shown
to re-establish gut
microbiome symbiosis).

The environment within: Exploring the role of **GUT MICROBIOME** in health and disease

Konkel L

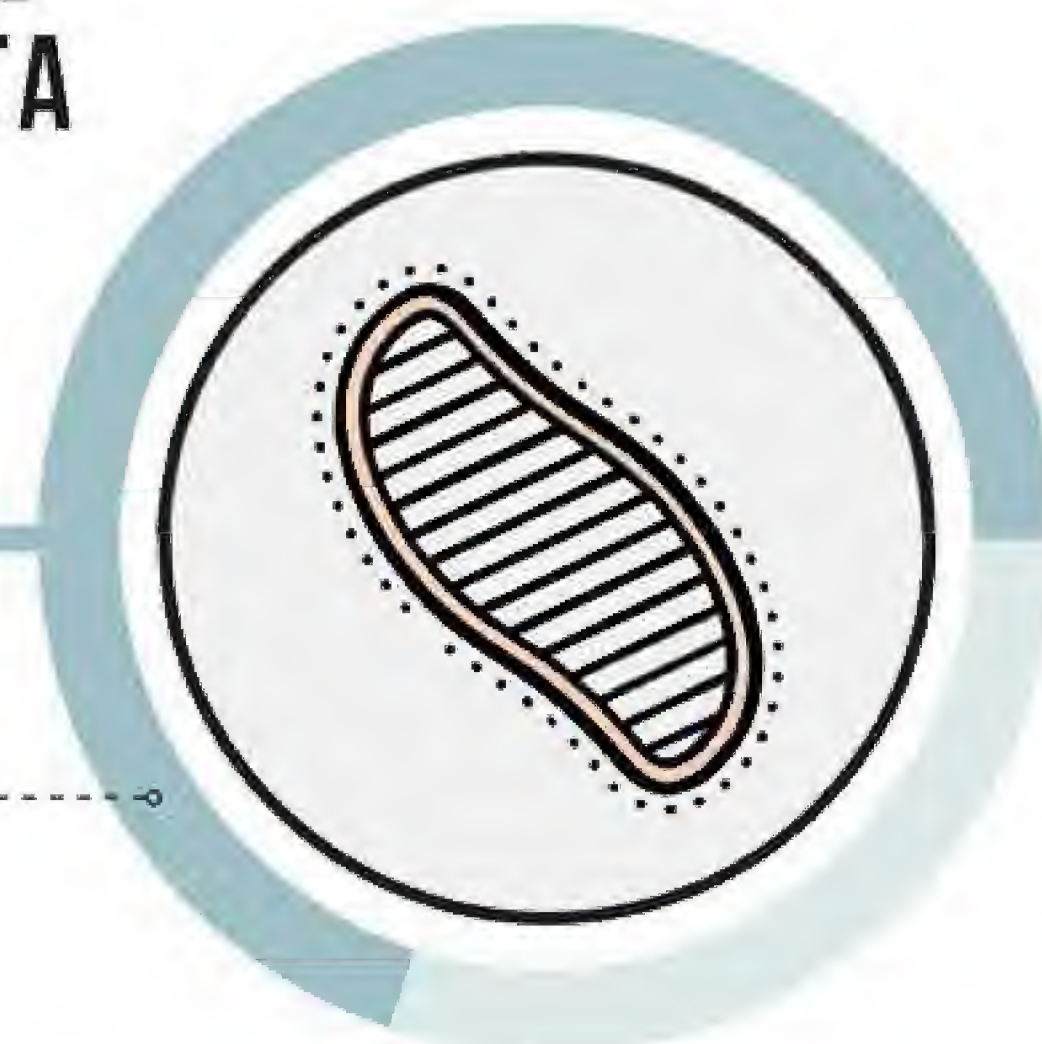
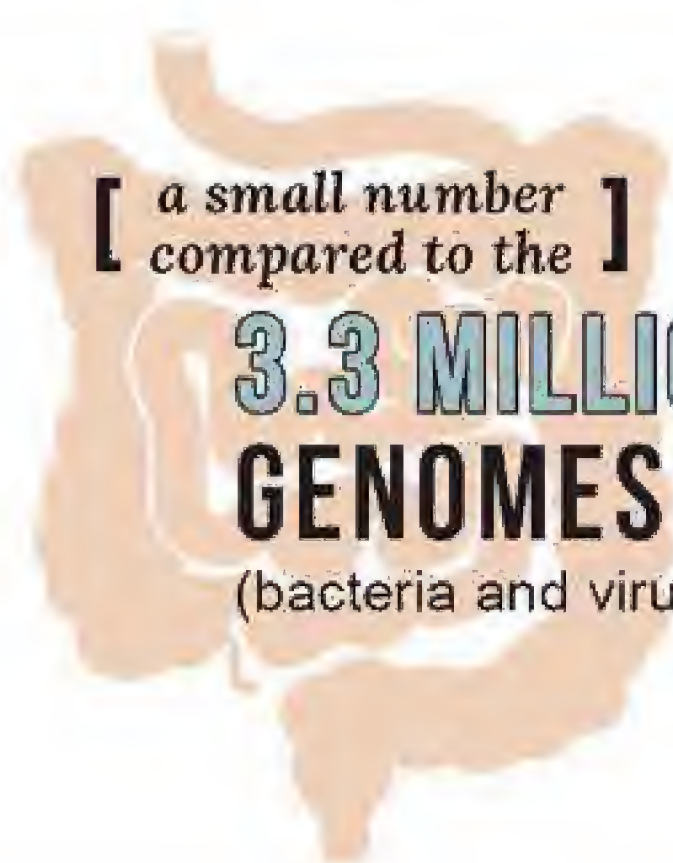
Environmental Health Perspectives, 121.9 (2013): a276–a281. <http://ehp.niehs.nih.gov/121-a276/>

The human genome codes for
23,000 GENES



[a small number compared to the]

3.3 MILLION ENCODED IN THE GENOMES OF THE MICROBIOTA
(bacteria and viruses) that live in the human gut.



Gut microbiota perform many important functions, including metabolizing indigestible nutrients, producing needed compounds and preventing the overgrowth of disease-causing bacteria.

Microbes in the gut also impact the health of organ systems outside the GI tract. Although the microbes themselves usually remain in the gut, they can influence the behavior of immune cells they contact there, which then travel throughout the body, where they may trigger or temper inflammatory or disease responses.

This impact is quite large:

70% OF THE IMMUNE CELLS IN THE BODY, AT ANY GIVEN MOMENT, ARE FOUND IN THE GI TRACT

Celiac disease is an example of an autoimmune disease that requires genetic susceptibility and an environmental trigger.

Interestingly,
LESS THAN 10% OF PEOPLE WITH THE GENETIC PREDISPOSITION DEVELOP CELIAC DISEASE WHEN EXPOSED TO GLUTEN.



Researchers believe that the **HEALTH OF THE GUT MICROBIOME PLAYS A SIGNIFICANT ROLE** in determining whether an individual will ultimately succumb to the disease.

A study of infants with genetic susceptibility to celiac disease showed that their intestinal microbiome was less mature and less stable at 2 years compared to control infants.



Among the genetically susceptible infants, **EXPOSURE TO GLUTEN AT 6 MONTHS OF AGE WAS MORE LIKELY TO TRIGGER THE DEVELOPMENT OF ANTIBODIES THAN EXPOSURE AT 12 MONTHS**

—suggesting that certain periods of microbiome development may be more likely than others to result in disease when an environmental trigger is present.

Increased understanding of the function of the microbiota in triggering disease may provide researchers with avenues for treatment. Research with fecal transplantation has helped to restore healthy microbial communities in patients with inflammatory bowel diseases. It may be easier to develop therapies to affect changes in the gut microbiome than to alter immune pathways. Some researchers look forward to the day when high-quality medical care will include administration of selected bacteria to prevent autoimmune disease.

An infant's gut changes significantly over the first few months of life and becomes relatively stable by age 2. After that, puberty and lactation are among the few key periods of development that remain.

"Changes in microbial colonization of the gastrointestinal tract, a process that starts at birth, have been identified as a major risk factor in the development of food-related autoimmune diseases."

Influences of diet and the GUT MICROBIOME on epigenetic modulation in cancer and other diseases

Paul B, Barnes S, Demark-Wahnefried W, Morrow C, Salvador C, Skibola C, Tollefsbol TO

Clinical Epigenetics. 7 (2015): 112.
DOI:10.1186/s13148-015-0144-7

The gut microbiome produces metabolites that, in concert with dietary factors, affect the expression of genes and epigenetic processes that impact human health. One area of increasing attention is how these factors play a role in development of cancer and response to treatment.

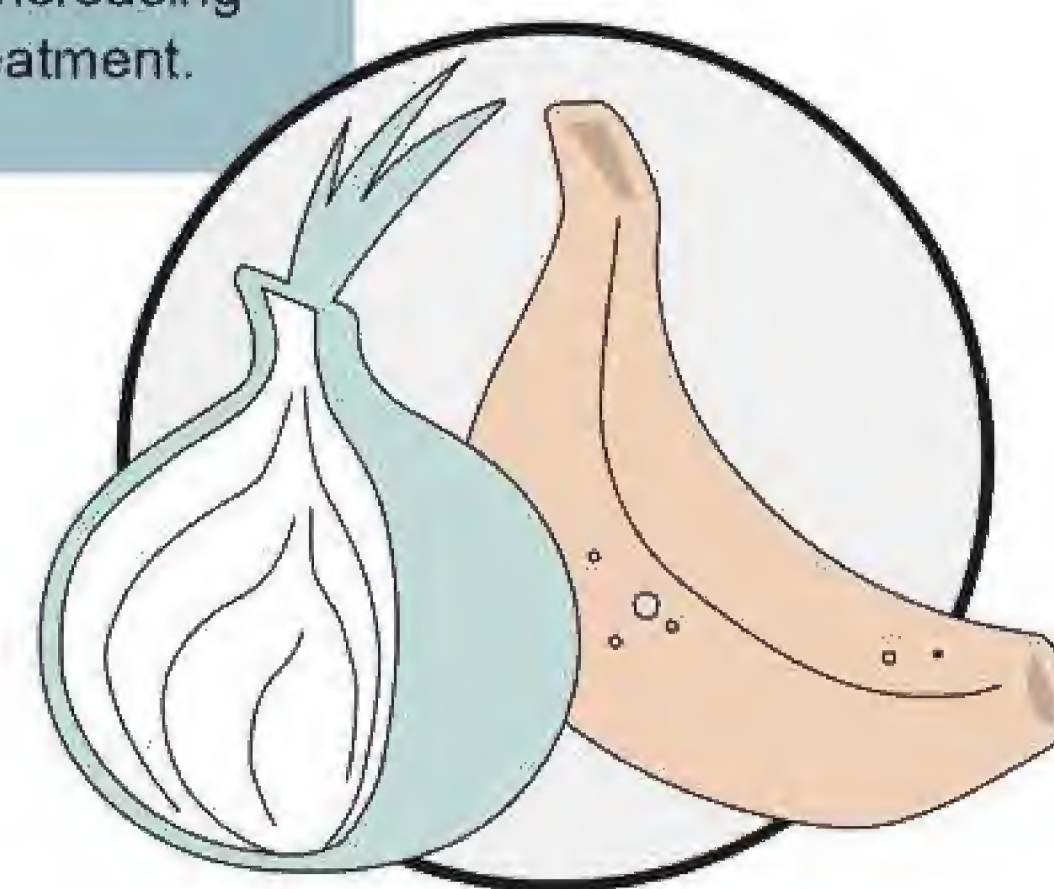
Bacteria can cause changes in patterns of DNA METHYLATION

a process that permits a gene to be turned on or off, by producing metabolites such as folate, butyrate and acetate.

Certain alterations in DNA methylation patterns can lead to unresponsiveness of tumor suppression genes.

Intestinal bacteria are one source of the vitamin *folate*, which is involved in many metabolic pathways, including the synthesis of nucleotides for DNA. Folate availability impacts the efficiency of DNA replication, repair and methylation.

Butyrate, a short-chain fatty acid (SCFA) produced in the gut, can activate silenced genes in cancer cells and suppress tumor growth.



CERTAIN TYPES OF DIETARY FIBER—PREBIOTICS

like inulin found in bananas, onions and Jerusalem artichokes—are fermented by colonic bacteria to produce butyrate, which has a protective effect against colon cancer.

The intestinal microbiota also produce the vitamin *biotin*, which plays a role in DNA repair and chromatin structure.

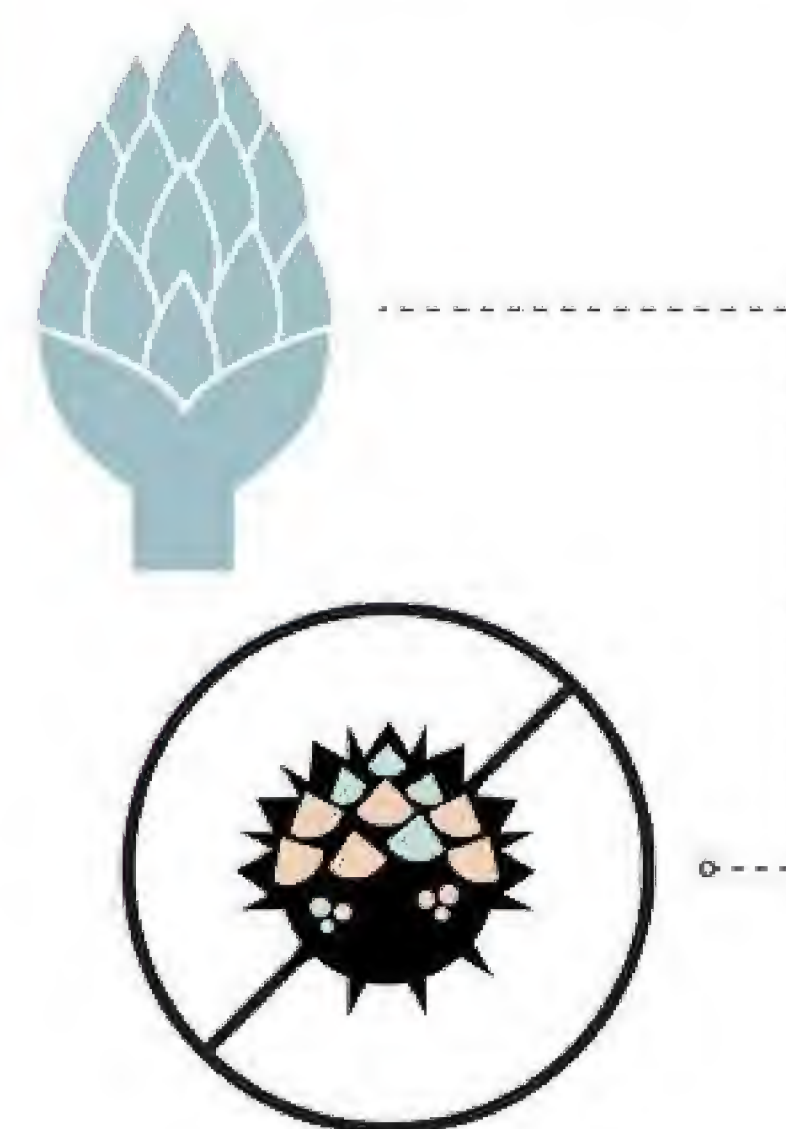
Decreases in SCFA concentration and anaerobic bacteria in the colon are associated with colon cancer. Specifically, several butyrate-producing bacteria are found in smaller numbers in the fecal matter of individuals with colorectal cancer, whereas bacterial species that degrade mucins, the proteins that produce the mucus that protects tissue membranes, are found in higher amounts.

RESEARCHERS BELIEVE IT MAY BE POSSIBLE TO PREVENT COLON CANCER BY IMPROVING THE MICROBIAL COMMUNITY IN THE INTESTINAL ENVIRONMENT

—for example, by including probiotics in the diet.

The gut microbiome may influence the development of hormone-related cancers such as breast, ovarian and endometrial cancer through modulation of estrogen metabolism. Some bacterial species produce enzymes that alter the estrogen molecule so that there is increased absorption of free estrogen, leading to the hormone-dependent cancers. Dietary compounds can prevent this; one example is the dietary intake of O-methyltransferases from tomatoes, which can reduce exposure to the potentially mutagenic estrogen metabolites.

Researchers believe that administering an “epigenetic diet” that enhances the health of the microbiome may become an important tool in the prevention of cancer.





Frank Forenich

Exuberant Animal Vision Statement

Light was fading on the grassland as the day drew to a close. The thunderstorms were quiet now, with just an occasional spark of lightning on the horizon.

The tribe gathered around the fire, and an old man joined the circle and squatted down. He was a shaman, a man of exceptional power and knowledge.

His body was withered and wrinkled, his left arm hanging limp after a savage mauling by a lion many years ago. He could no longer hunt, but his word was held in high regard. "Come together," he began, "and I shall tell you of my vision."

The tribe grew silent, all eyes turned in his direction, all ears tuned to his voice. "As I slept, I saw a future that is coming to our land. You must hear these words. The survival of our people depends upon it." He paused, looking into the spirits of his tribe. He knew this story was unlike any he had told before.

"It was late. The night was cloudy and low, as if wrapped inside another night. I sat on a hilltop, waiting. Suddenly, I felt a great weight upon my chest, then my entire body. I struggled and called to the ancestors. I was afraid."

The tribe was transfixed. This was no ordinary dream.

"I saw people everywhere," he continued, "but the land was no longer whole. I was in this world for many days and nights. There were people everywhere, but I was invisible to them. My spirit was in turmoil."

"The land was covered with wide stone paths and there were huts everywhere. Some were giant huts that reached all the way to the sky. Big enough to hold many tribes."

"The people spent most of their time in these huts. They did not walk on the land as we do. They traveled in rhino animals, with round legs. The people could get inside them and travel from place to place on the wide stone paths."

"I tried to breathe, but the air was foul. The rhinos made the air stink. The noise was

deafening and I had to cover my ears."

The old man paused to gather his breath and his spirit. A shadow passed over his face and he began to speak again.

"My spirit was sad. The people walked from hut to hut, never looking up, never feeling the world. Most of them were looking at magic lights and talking into their hands, talking as if there were people in their hands that could hear their words."

"I walked farther and began to notice that the people were weak, in body and spirit. Their bellies were huge and looked ready to burst. They did not stand proud. They struggled to walk. They seemed like strangers to their bodies, uncomfortable in their skin. Many of them seemed sick."

"Some of the people did move their bodies, but it was not hunting or dancing. They went to a special hut that they said was made for moving. They plugged their ears and watched the magic lights as they walked on paths that went nowhere. Then they went back to their rhinos and looked at the magic lights again."

"I watched as the people ate. The people always had food with them. It was in their huts and in their rhinos and they had to do nothing to get it. They just ate and no matter how much they ate, they always seemed to want more."

"Many of the people were sick, but they didn't know what to do. They had forgotten how to be alive. Some of them swallowed magic potions. Some of them went to a hut to see a shaman, but all the shamans did was look at the magic lights."

"The people had forgotten about the land, the plants and the animals. No one paid attention to the wind or the light. They said that they got everything they needed from the magic lights, but I think not."

"I tried to tell them our story, but they could not hear me. I wanted them to know about the

"You must be careful what you eat. The new world will have lots of food, but much of it will be poisonous. You must be careful. Eat wild foods when you can find them, but you will have to look hard."

land and the old ways. Then I woke up on the hill and it was dawn. I was exhausted and did not move until the sun was high."

The people stared at the shaman in wonder, trying to understand the meaning of his disturbing story.

"This was my vision. I know it to be our future. It is sad and dangerous. To survive, there are things that you must do..."

"First, you must stay strong in your bodies, no matter what happens. The new world will try to take your spirit and your life. You must not allow this to happen."

"The new world will try to keep you apart from the land, but you must get out! Do not go to the hut with the path that goes nowhere. Go to the wild lands, the hills, the grasslands and the mountains. Walk long trails and sleep under the stars."

"You must be careful what you eat. The new world will have lots of food, but much of it will be poisonous. You must be careful. Eat wild foods when you can find them, but you will have to look hard."

"Above all, you must find a tribe and keep it alive. The new world will try to scatter you and divide you. Do not give up your life to the magic lights. Talk to one another, tell stories and speak of your dreams. Celebrate and dance. These are the things that you must do."

The old man began to sing softly. Finally, he spoke again.

"There is no way to know what may happen, but use your hunting skills and stay true to the old way. Stay strong and keep looking. Whatever happens, we must find each other."

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PRODUCT REVIEWS

1



FATCO

Our favorite tallow-based body-care line is back—and better than ever—with a new name, new packaging and the same great formulation. Formerly Fat Face Skincare, FATCO harnesses the power of grass-fed beef tallow, essential oils, rich beeswax, cocoa butter, shea butter and coconut oil, among other ingredients, to nourish and protect even the most sensitive skin.

FatFaceSkincare.com

Calivirgin Olive Oil

Farm-fresh, award-winning olive oil from Coldani Olive Ranch in Lodi, California, is a reliable choice for your kitchen. The Calivirgin Olive Oils are organic, unfiltered, cold pressed and delicious. With a range of products, from the original Calivirgin Extra Virgin Olive Oil, with its fresh aroma, to more exotic offerings like the revolutionary Flavor Crush Olive Oils, Calivirgin Olive Oil has something for every table.

CaliVirgin.com



2

Naughty Turned Nice Granola & Treats

With a limited but impressive collection of delectable recipes, Nancy Beechy of Naughty Turned Nice is on a mission to turn our favorite indulgences into Paleo-friendly treats. The Paleo Party Mix—like granola, but better—is the perfect mix of sweet and salty, crunchy and chewy, while the cookies and bars just can't be beat.

NaughtyTurnedNice.com

3



4

Bubba's Fine Foods

The Paleo diet offers a wealth of flavor and nutrients, but one thing is often missing from an ancestral diet: crunch. Enter Bubba's Fine Foods, a purveyor of sweet and savory snacks that even the most diehard caveman can't turn down. Made with only the finest grain- and gluten-free ingredients like cashews, pecans, banana chips and shredded coconut, the Original Snack Mix and the UnGranola provide plenty of snap, crisp and that ever-elusive crunch, all within the parameters of Paleo.

BubbasFoods.com





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Safe Catch Tuna

Safe Catch is the only brand that tests every tuna that comes through its facility for mercury, ensuring that their canned tuna has the lowest heavy-metal levels of any brand on the market. Not only does this offer superior safety, but the quality and flavor of Safe Catch Tuna are top notch, too.

SafeCatch.com

5

Seaweed Bath Co.

The multi-faceted passions of this company have combined to create a product that nourishes the body and honors the environment, and uses the power of the natural world to do so. The full line of seaweed-infused body-care products from Seaweed Bath Co. has their customers covered from head to toe, with shampoos and conditioners, body washes and moisturizers, bath powders and detox products.

SeaweedBathCo.com

6



7



Superfood Coffee Co.

Recent years have seen us put everything from butter to egg yolks in our coffee, and Superfood Coffee Co. isn't content to be on the fringes of the trend. With a full line of tasty, superfood-infused instant coffees, this company is making sure that every sip promotes health through the use of powerful herbs and antioxidants like açai berry, maca root, reishi mushroom and cacao.

SuperfoodCoffeeCo.com

Spice Cave

The four Spice Cave Seasonings are inspired by the natural elements for use on everything from eggs and poultry to beef and veggies. Use these delicious, ingenious blends on their own or in concert for a symphony of cohesive flavor, as when the citrus Sea Seasoning mingles with the spicy-sweet Fire Seasoning to yield a tangy, savory blend that gently warms. On grilled shrimp or a salmon fillet, it's divine.

TheSpiceCave.com

8



BOOK

BALANCE STRESS

EAT, MOVE & THINK FOR BETTER HEALTH



Balance Stress author Mike Ritter compares the collective elements of your health to elephants on a seesaw. They're bouncing back and forth, and if one of them gets off, the other will come crashing down. It's a phenomenon he has witnessed in some of his fellow fitness professionals, who are usually among the healthiest of the population. They're lean with great diets, Ritter says, but stress is keeping them from obtaining optimal health.

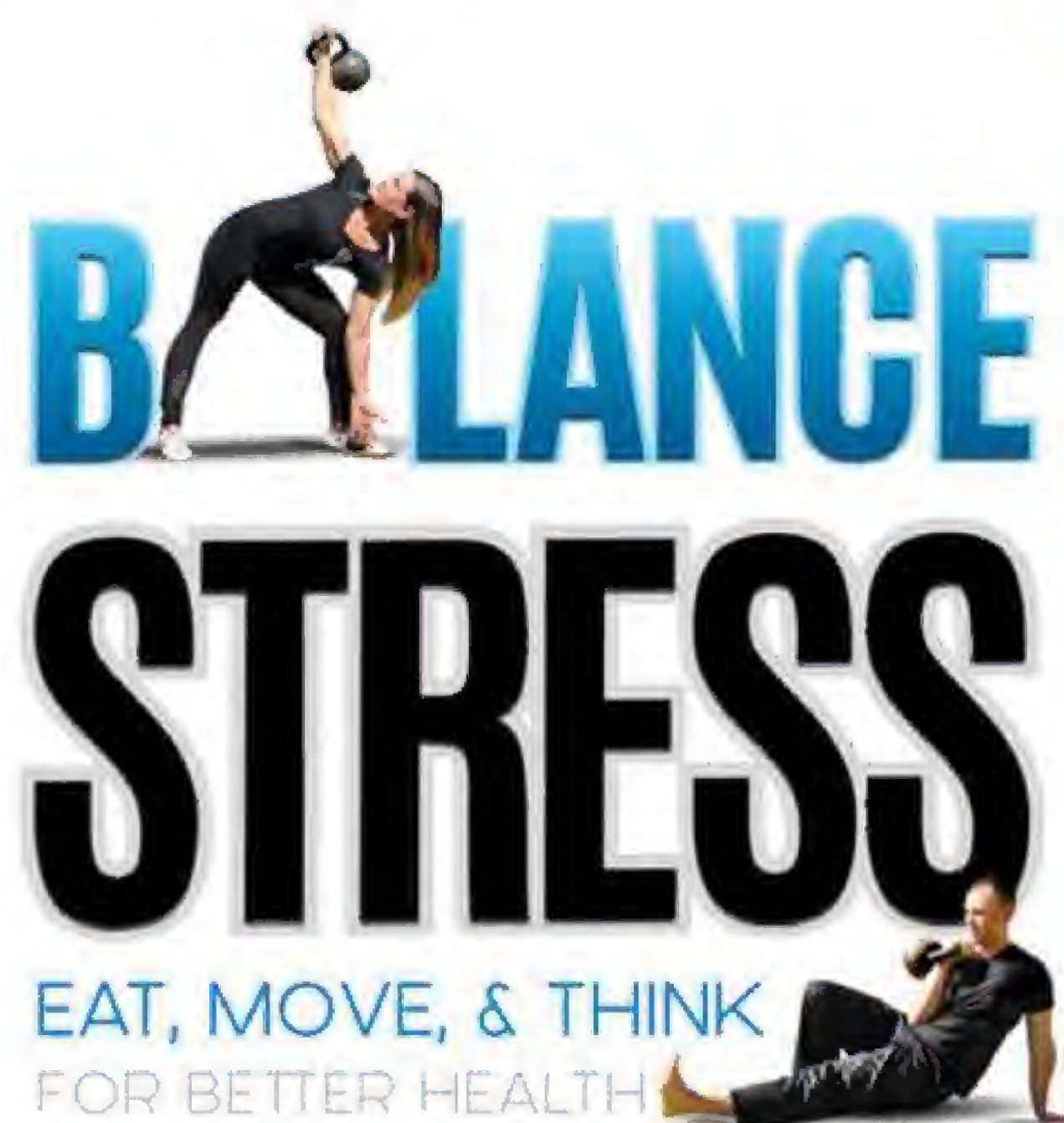
"If your psychological stress is through the roof, but your diet and movement is pretty good, you still have other components you need to work on," says Ritter. "Everything is related. Biology can't be segmented."

That interconnectivity is the underlying theme of Ritter's and co-author Michelle Richards' e-book, *Balance Stress: Eat, Move & Think For Better Health*. Ritter and Richards are personal trainers and co-founders of The Result Cult, their fitness, movement and nutrition coaching business based in Tampa, Florida, which is also open to the online community. The book—originally meant to be a 15-page summary of their tenets of fitness, but which quickly grew to 160—is a result of their wish to easily convey to clients the most important aspects of fitness.

Balance Stress is split into three sections: "The Stress Relief Project," "The Real Food Project" and "The Movement Project." What sets this book apart from other fitness books isn't just its focus on the connectivity of those three elements, but its emphasis on stress. Stress, while discussed often in the health community, sometimes seems to take a backseat to diet and exercise when it comes to the goal of getting healthy. "For all of the weightlifters, yogis, CrossFitters, endurance aficionados and sedentary humans, I have news: The greatest precursor to heart disease, heart attacks, strokes, depression and cardiovascular-related diseases isn't just a bad diet and a lack of exercise; it's stress," Ritter writes.

Both in the book and in our interview for this article, Ritter emphasized these effects on the modern-day human. We work hard, exercise hard, sleep little and sometimes, forget to eat well. We're all focused on achieving it all and being the best. "Our culture needs to squeeze out every ounce of productivity that we can out of ourselves," he says. "What we perceive as productive actually ends up being counterproductive."

Ritter takes the reader through the science of what stress is, what forms it takes (acute or chronic), the brain's role in stress management and how to mitigate it. Some of the best comments he's gotten about the book pertained to his "Five Ways to Become More Human" section, solutions he details to



help alleviate everyday stressors: expand your senses, play and walk often, reduce the crowd noise, avoid over-sanitizing and increase sun time.

Diet plays a big role in optimizing fitness, and Ritter recommends a Paleo approach—meats, veggies, nuts, seeds, little starch, some fruit and no sugar. He begins the "Real Food" section with a disclaimer: The notion that we need to count calories to achieve health is a falsehood. "The truth is that calories are necessary for a healthy body," Ritter writes. "I cannot stress the importance of being healthy over being thin."

Ritter made his way to the fitness and health world after gaining 45 pounds over five years. A former college baseball player, Ritter knew how to be an athlete, but realized he didn't know how to exercise and eat healthy. After finding a trainer and Robb Wolf's *The Paleo Solution: The Original Human Diet*, Ritter lost the weight and became a trainer himself.

Richards' background is similar. A former college softball player, she battled the typical body image issues many female athletes face, like over-exercising and under-eating.

"She was an athlete at heart and didn't want to sacrifice her health," Ritter says. "We were searching, independently, for a greater purpose. I felt the need for cultural change."

Richards' specialty is movement. The way we exercise and move today, as opposed to the way our ancestors moved, is wrong, she argues in the book. Our modern bodies accrue so much unnatural chronic stress, Richards writes—and we



need to relearn how to move and exercise correctly in order to combat those ill effects. Richards makes the case that repetitive motions like running only work our bodies one way and lead to pain; humans need to incorporate other movements like bending, twisting, squatting, pushing and pulling.

In the "Real Movement" section, as in the previous two, the authors emphasize listening to your body to help encourage health, as opposed to just looking fit. Richards also provides pictures and instructions for proper movements, like squats, to help readers evaluate and improve their current form. "People have very unnatural movement patterns, which tend to create pain," Ritter says. "We tend to treat that pain instead of the movement problem creating that pain."

Balance Stress is incredibly informative, perfect for someone just starting their journey into wellness, or even a fitness

professional looking to improve just one aspect of their health. Heavy on science, Ritter and Richards hope to help readers truly understand the whys behind their writing.

"Stress is a vague topic for a lot of people. But stress is the trigger for so many problems like hormone imbalance, poor mood, lack of motivation and weight gain. It's extremely important that people learn to acknowledge, measure and modify behaviors which cause these problems and finally avoid the guessing game. Our book will help you do that in a simple 'one-thing-at-a-time' approach."

To get 10 percent off *Balance Stress*, visit ResultCult.com and use code **paleomag10**.

Visit ResultCult.com to check out more about Ritter and Richards, and their local and online coaching services.

"EVERYTHING IS RELATED. BIOLOGY CAN'T BE SEGMENTED."
— Mike Ritter



Photo by Tori Purer

In this feature, we review Paleo-related blogs and websites and chat with the bloggers as we sift through the volumes of online Paleo-lifestyle resources—so you don't have to!

Next up: Ronny Joseph from *Primal Gourmet*.



PRIMAL GOURMET

RONNY JOSEPH // COOKPRIMALGOURMET.COM

[primalgourmet](https://www.facebook.com/primalgourmet)

[@primal_gourmet](https://www.instagram.com/primal_gourmet)



Ronny Joseph is a Toronto-based grad student studying architectural history at York University, and he loves food, both healthy and otherwise. While he may not seem like a prime candidate to have launched one of the most visually stunning and mouthwatering Paleo websites out there, here we are. Primal Gourmet is chock-full of stunning images and even some fun how-to videos, as well as an eclectic mix of delicious recipes inspired by, well, whatever strikes his fancy.

"I could be walking down the street and smell something good, so I'll try to adapt a Paleo version," Ronny explains. "Even walking in the grocery store and seeing what's on sale and in season, I'll

"He invited me over for lunch and made a basic but good meal; I think it was just chicken and sweet potato. Then he told me, 'This is Paleo,' and I thought, 'This is something I can do for the rest of my life.'"

Thus began the process of experimenting with his own dishes and then taking those awesome pictures you may have already seen on Instagram. A self-taught cook, Ronny started sharing his new passion with his friends and family. "I lost a significant amount of weight, but I also gained a lot of health," he says, remarking that his doctor visits and blood work showed some incredible improvements after he switched to Paleo.

The tagline for his website is "Paleo

fly off the handle and cheat for a week straight. Mentally and physically, I truly believe that a cheat meal here and there ramps up your metabolism and is good for morale." He thinks there's nothing wrong with using a cheat meal as a kind of reward system, something to look forward to on occasion, especially if that makes it easier to transition into a Paleo approach to eating. He also stresses that patience is a key to improving your eating habits. "It will take a month, sometimes longer, to break bad habits," he says. "You have to give yourself time, and be patient. There are always healthier substitutes for your cravings, there are always options."

Although Primal Gourmet is still in its initial stages, Ronny is already getting plenty of feedback and messages from folks interested in partnering with him. Soon, he'll be collaborating with the Healthy Butcher, a shop in Toronto that offers a grocery delivery service, by contributing recipes to their monthly newsletter. Ronny is also planning on putting together a vlog on the mental aspect of weight loss—but for now, he's happy with the organic and natural growth of Primal Gourmet.

"I'm pretty bad at all that SEO stuff," he laughs. "I'm not about buying

“There's no reason to restrict yourself from foods that are *delicious*, but there are reasons to restrict yourself from foods that are *toxic*.”

create something based on that. I am a student, after all.”

His story is familiar: Having struggled with his weight and tried every diet he could find, around his birthday three years ago he said he hit “rock bottom” with how uncomfortable and frustrated he felt. He decided to make a list of things he wanted to change and work on, avoiding target scale numbers and focusing on health and happiness instead. After trying a relatively effective but tedious bodybuilder-style diet—eating every few hours, lots of rice and oatmeal—his friend turned him on to Paleo.


for Foodies,” and you can tell he's targeting readers who don't just eat to live. “I want to reach people who love food but may have problems with food. My target is anyone who's been through what I've been through, but may not know there's a way to still eat well but be healthy,” he says.

The honesty he puts into his recipes and in telling his story is what makes his site stand out. “I call myself high risk; I'm always at risk of going back to a bad relationship with food,” he says. Another dose of honesty you may not see on many Paleo sites: “I encourage cheating, but there are rules to it. You can't just

followers. I'm just trying to be consistent and keep putting out good recipes.”

He says it's the feedback from those close to him that has made this passion project more than worthwhile. He's convincing friends and family to eat healthier, and has had old school friends reach out to congratulate him on his journey. While the call of junk food might always be a struggle for some of us, the goal is to improve your relationship with food and enjoy it.

“There's no reason to restrict yourself from foods that are delicious,” says Ronny. “But there are reasons to restrict yourself from foods that are toxic.”



Zucchini Noodles

with Shrimp & Bacon

- 2 large zucchini, spiralized
- 3 slices grass-fed beef bacon, thinly sliced width-wise
- 12–15 medium shrimp, peeled, deveined and butterflied (tails left intact)
- 2 cloves garlic, thinly sliced
- 1 tsp dried crushed red chili flakes
- 1 tsp sea salt, plus a little extra to taste
- 1 lime cut into wedges for squeezing

Freshly cracked black pepper

Feed the zucchini through a spiralizer one at a time, creating long strands of noodles. Depending on your spiralizer, you may need to cut the noodles into more manageable lengths.

Place the noodles in a colander and sprinkle with 1 teaspoon of kosher salt. Delicately massage the salt into all of the noodles so as not to break the long strands. Set the colander over a bowl and set aside for 1 hour to allow the moisture in the zucchini to drain.

Meanwhile, leaving the tails intact, peel and rinse the shrimp under cold water. Pat them dry with a kitchen towel and transfer to a cutting board. Using a small paring knife, butterfly the shrimp by holding the tail in one hand and, using the other hand, running the knife down the length of each shrimp from the top of the tail to the end of the flesh. Both veins (top and bottom) should now be easy to remove by hand or with a wooden toothpick. Set the shrimp aside for the moment.

Once the moisture has drained from the zucchini, heat a nonstick skillet over medium-high heat and add the bacon. Stir occasionally to avoid burning.

Cook until crispy (approximately 5–7 minutes) and transfer to a plate lined with paper towels.

Discard all but 1-1/2 tablespoons of the bacon fat from the skillet. Return the skillet to the heat, keeping it at medium-high, and add in the sliced garlic. Stir the garlic continuously to avoid burning, cooking for no longer than 30 seconds. Add all of the shrimp, and season with a pinch of salt and pepper and 1 teaspoon of chili flakes (adding more or less chili depending on your preference). Toss the shrimp occasionally to cook all sides evenly and prevent burning. Cook until all of the shrimp are bright pink and the flesh of each shrimp has curled (approximately 5–7 minutes).

Turn off the heat and add the drained zucchini noodles to the skillet. Toss everything together until combined and the noodles are warmed through. The residual heat from the skillet and shrimp should heat the noodles but will not cook them, resulting in a warm, al dente noodle.

Transfer the noodles to individual bowls and serve with some lime wedges.

In 2014, *Inc.* magazine named Tessemae's one of the "Coolest Young Companies" in their annual 35 Under 35 contest. In that same year, *Inc.* readers voted Tessemae's as the "top" company on the list!



With over \$25 million in annual sales, \$5 million in investment capital from Under Armour founder Kevin Plank, and widespread distribution in national grocery store chains such as Whole Foods, Kroger, Safeway, The Fresh Market and Costco, it's hard to imagine anything but a success story for Tessemae's All-Natural. However, the company known for its distinctive bottles and quality salad dressings and condiments almost didn't make it.

Back in 2010, Tessemae's founder, Greg Vetter, was in a pinch. "I bankrolled (the business) myself," he recalls. "We bootstrapped it for the first few years, liquidated my 401(k) and took out a bunch of credit cards." Greg and his wife, Genevieve, were expecting their first child, and he was still working a full-time job as an employee benefits broker in addition to playing professional lacrosse. After working all day, Greg would go to a local barbecue restaurant at night to make salad dressing, but burning the candle on both ends was taking its toll. His brother Brian had just graduated from college, and Greg recalls the conversation he had with him.

"I said, 'Hey man, you're either going to come on board or we are going to have to shut things down.'"

Greg had started Tessemae's several years before, inspired by requests for—and sometimes even the theft of—his mom's, Teresa, special lemon-garlic salad dressing. "I came home from work one day and noticed the salad dressing was missing," Greg recalls. "I tracked down one of my buddies and he confessed to taking it. He said he just woke up that day jonesing for my mom's dressing!"

The dressing, a simple combination of olive oil, lemon juice, garlic, homemade mustard and sea salt, was the topic of conversation at every tailgate party and cookout, and had guaranteed that Greg and his brothers ate their vegetables growing up. On a whim, Greg pitched the idea of starting a family business to his mom and she agreed, on the condition that he secure a distribution deal first.

By claiming to be a food manufacturer, Greg secured a meeting at his local Whole Foods store. He arrived with a tupperware full of romaine lettuce tossed with the lemon-garlic dressing and presented it to the manager. "He opened the tupperware and licked the dressing off the lettuce," Greg recalls. "He said, 'You've got something really special here.'" That meeting got Greg another meeting with the regional Whole Foods buyer and, 200 pages of documents later, Greg had become a certified food manufacturer, with Whole Foods as his first client.

To market their new product, Greg decided to do an in-store demo at Whole Foods, which is a fancy way of saying that he would stand at a table trying to convince passersby to sample and purchase his product. This is the moment when things got real. "We set a national sales record for Whole Foods," Greg recalls. "We sold 660 bottles in five days in one store." Greg's brothers, Brian and Matt, had been recruited to help with the demo effort, and it may have been the result of this successful "proof of concept" that convinced Brian to say, "Okay, I'll do it" when Greg asked him to become Tessemae's first full-time employee.

"I could literally put that on anything and eat it."

Tessemae's products are gluten free, sugar free, dairy free, vegan, Paleo, kosher, low sodium and Whole30 Approved.

With Brian on board, and Greg on the hook for his salary and benefits, Greg redoubled his efforts to make Tessemae's a success. They sent representatives to all of the Whole Foods stores in their region, expanding their distribution one store at a time, and earning the respect of Whole Foods executives in the process. Eighteen months after Brian joined the team, Greg quit his own job and came on full time himself.

"It's a struggle, but it's also purifying," Greg says. "You evolve at a faster rate because you're putting forth such a crazy effort."

Tessemae's now occupies a 36,000-square-foot, state-of-the-art manufacturing facility about seven miles outside of Baltimore in Essex, Maryland. Dubbed "the tree fort," the facility features brightly colored offices that correspond to various Tessemae's product labels, a large group eating area, a retail shop and a "love wall."

"It's a wall of thank-you notes from customers," Greg says. "We have about 500 and counting, which is about 5 percent of the messages we get from Facebook, Twitter and Instagram. We print them out and put them on the wall, most of them saying something along the lines of, 'Thank you for making something that doesn't suck!'" When asked about his own favorite Tessemae's product, Greg says it's their Buffalo Sauce. "I could literally put that on anything and eat it."

Not content to rest on their laurels, Greg and his team of nearly 150 full- and part-time workers, which includes several family members, are continuing to innovate with their products and distribution. They've recently received the USDA Organic designation on a number of their products, in addition to releasing squeeze packets of several of their most popular dressing and condiment flavors, a shot across the bow of condiment heavyweights like Heinz. Marriott Hotels & Resorts now uses Tessemae's dressing in some of their Courtyard by Marriott hotels, and when Tessemae's met with executives from Kroger to discuss a new distribution deal, it was Kroger that made the pitch.

For more information about Tessemae's All-Natural, go to **Tessemaes.com**, and follow Tessemae's on Instagram at **@tessemaes**.



Vetter Brothers

Tessemae's is named after Greg's mom, Teresa, who goes by the nickname "Tessemae" (or just "Tesse" for short).

To listen to Tony's interview with Tessemae's CEO, Greg Vetter, check out Paleo Magazine Radio episode #123, "Making Millions with Momma's Salad Dressing." On the show, you'll hear more about the founding of Tessemae's, how Greg deals with the stresses of entrepreneurship, and how he built a multimillion-dollar business with his mom's lemon-garlic salad dressing.

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ERIC MITTMAN PHOTOGRAPHY

[BUSINESS SPOTLIGHT]

LIBERATED

SPECIALTY FOODS

It's a feeling that anyone suffering from a chronic disease knows all too well. It's a sense of being trapped, victimized and betrayed by your own body. It's contagious, too, spreading out into the lives of parents, caregivers and partners. Going the conventional route might offer a small mercy, a short-term fix, a diagnosis, and a name for your pain. Taking the alternative path is equally fraught. Ingredient labels say one thing but mean another, and safe options are limited at best. It's a feeling Stacey Schlaman knows because she's lived it—but now she's free, liberated, and she wants you to be liberated, too.

Stacey grew up in Auburn, California, a rural town east of Sacramento on the edge of Yosemite National Park. Her family lived on a two-and-a-half acre farm, and she was active in her school's 4H club. After graduating from high school, Stacey enrolled at her local community college. To help pay for expenses, she found work at the Flour Garden, a bakery run by two Berkeley hippies who had a knack for making sourdough and raspberry-cream-cheese-filled cookies.

Stacey eventually left Auburn, and the Flour Garden, to transfer to Chico State University, where she completed her degree in social anthropology and Native American studies. "Initially, it was just about being outdoors and being able to

experience different cultures," she recalls. "That really intrigued me." With student loans to pay off, however, practicality won, and Stacey took a sales manager position with the Sears & Roebuck company in San Francisco.

The intervening years brought many changes. Stacey met her future husband, got married, moved to Huntsville, Alabama, gave birth to her daughter and then moved again to Chester, England. While in Chester, Stacey gave birth to a second child, a boy, and afterward took an interest in fitness and nutrition and began to work out regularly. She also started to think that nutrition may have had something to do with the digestive issues her daughter had been plagued with since she was born. "Pediatrician after pediatrician said everything was fine, even though she wasn't growing well and had a distended stomach," Stacey recalls. "You start second-guessing yourself."

After moving back to Huntsville, Stacey remembers the moment when everything changed. "We took my son in for a doctor's appointment, and although he's two years younger than my daughter, he had completely outgrown her." The doctor suggested that Stacey's daughter be tested for celiac disease, and the test came back positive.





A strict Paleo bakery on a back road in Alabama isn't exactly the business plan most people would cook up, but the demand was there.

"I felt vindicated, justified, but it's something that I probably knew all along but didn't trust myself enough to keep pressing," Stacey recalls. "She was 6 and a half and had been going through this her whole life."

With the knowledge of her daughter's diagnosis burning in her mind, Stacey eliminated everything containing gluten from their home. Her daughter's health improved only slightly, so the next thing to go was grains. With little improvement still, Stacey eliminated nightshades and dairy, and tried a number of supplements. Eventually she found a book titled *Breaking the Vicious Cycle*, which described the Specific Carbohydrate Diet (SCD). After reading the book twice, Stacey decided to follow the SCD protocol, which involved multiple phases, starting with an intensive three-day diet of bone broth, coconut oil and steamed vegetables. Finally, her daughter's symptoms began to improve.

Due to the fact that her daughter had to follow the SCD protocol all the time (no "80/20" here), Stacey began to think, "Wouldn't it be great to go to a place where I knew I could trust the labels?" After several months of joking about opening their own café, Stacey and her husband noticed that a local church was for sale, and decided to go for it, beginning renovations in 2014. They preserved the exterior of the church, but on the inside created an open kitchen so their customers could actually see the ingredients they were using. They dubbed the business

Liberated Specialty Foods, a testament to the feeling of freedom that the products they sell can provide.

After opening, Stacey was blown away by the support she got from her local community. A strict Paleo bakery on a back road in Alabama isn't exactly the business plan most people would cook up, but the demand was there. She also reports that her daughter, now a teenager, is doing "really, really good; phenomenal." Freed of the burden of having to scrutinize every label and food that her daughter eats, Stacey is now focusing on taking her products online and into stores like Whole Foods, The Fresh Market and Earth Fare. She's also in the process of certifying her products as gluten free and GMO free.

The most popular Liberated Specialty Foods product is their cheddar crackers, an SCD take on Goldfish crackers, with a close second being the Paleo-friendly cashew and coconut breads. Liberated also makes SCD- and Paleo-friendly pizza crusts, which customers can top with Liberated Pizza Sauce.

For more information about Stacey and Liberated Specialty Foods, go to LIBERATEDSPECIALTYFOODS.COM.

Follow Liberated Specialty Foods on Instagram at [@LIBERATED.SPECIALTY.FOODS](https://www.instagram.com/LIBERATED.SPECIALTY.FOODS).

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The mighty morel mushroom: sought after by chefs, professional mushroom hunters and novice fungus eaters. It's the very best of the few edible mushrooms that fruit in spring. Not only does it have a meatier texture than most store-bought mushrooms, but it's relatively easy for novices to learn to safely identify. As the old folks say, "If it's hollow, you can swallow."

Morels (*Morchella deliciosa*, *M. esculenta*, *M. elata*) somewhat resemble the outline of a cartoon Christmas tree: a fat stalk and a crinkly, conical cap. If you cut a morel in half from top to bottom, both the stalk and cap have enough of a void that you could almost stick one on every digit like so many finger puppets. The hollow is also big enough to house a few insects—another reason to slice them open before cooking. True, there are a few mushrooms that with some enthusiastic wishful thinking look enough like a morel to earn the name "false morels," but they are solid inside. If you find those, leave them be. They are either unappetizing or will play havoc with your digestion.

In any event, you don't want to eat any wild-caught mushroom raw for three reasons. First, they are about as digestible as wood, so there's no nutritional value in them. Second, a tiny number of people will be mildly allergic to any given mushroom, and more so one that hasn't been cooked. Third, there's a tiny chance that on the surface of the mushroom there could be some woodland bacteria that won't sit well with some people. So be a smart mushroom hunter. Cook morels and everything else you find for at least a few minutes in butter or some other fat, and only eat a small amount of a new species your first time to learn if you're sensitive.

Morels appear in mid-spring, after the last frost,

but before the tree leaves come out. They seem to be triggered by the soil temperature reaching 50 degrees and rainfall. Being a good morel hunter means being a good tree hunter. The submerged part of a morel—its inedible, stringy mycelia—grows on forest floors in association mostly with mature tulip poplars, but also elms and among old apple trees in orchards. In the Midwest and Pacific Northwest, morels respond to the previous year's forest fires with great flushes rising from blackened earth. Unfortunately, Southern morels haven't learned this trick, making them a bit harder to track down.

Chefs and farmers market shoppers will pay \$25 to \$50 a pound for fresh or dried morels. And if you've ever had them in a stew, perhaps with venison and ramps,

you'd understand why. If you have a surplus, putting them in a dehydrator overnight at about 110 degrees will let you save them in a jar in your cupboard. Rehydrate for a few minutes in warm water before adding to a sauté pan or casserole, or toss them straight into a soup pot.

Don't be discouraged if you don't find morels on your first foray. Most edible soil-borne mushrooms announce themselves across the forest floor like so many brightly colored periscopes of yellow, orange, red or blue. But morels camouflage themselves quite well. They wear the brownish grays of fallen leaves, with their outline broken up by the shadowy craters in their caps. My technique for finding morels? Like the commander of a luckless sub-chaser, I often stop in disappointment and disgust at

being empty-handed even though I'm standing among massive tulip poplars. Then I look down at my feet. Half the time, I'm standing in the middle of an under-the-radar fleet of morels. Then I use my pocketknife to cut them off at soil level (no sense getting dirt in all those craters) and debate the various ways to cook them on the way home.

feral feast:

Morels & Thistles

mighty morels: *the finger-puppet fungi*



There are few farm or garden weeds more hated than bull thistles (*Cirsium vulgare*). And for good reason. As with all thistles, the leaves are very prickly. The roots run deep, making them hard to pull. The seeds float like dandelion fluff and will launch their next generation into every downwind plant bed. Thistle is so hated that it's considered an indicator of a poorly managed farm. But I now love them. Not for the flower bud and roots, which are fair edibles, or the leaves' midribs, which when young are a good green for sautéing (after you strip away the prickles). For me, the best part is the stalk. At its prime, you'll enjoy the sweet taste and juicy texture of honeydew melon.

Catch a bull, or most any, thistle in mid-spring, after some good rain when the stalk is still young and the flowers have not yet formed or have only just started

opening. Find a non-prickly spot on the stalk to hold with thumb and forefinger. (Those living a callus-free lifestyle may want to don leather gloves.) With your pocketknife, cut off the stalk at the base and slice off each of the leaves and flower buds where they meet the stalk. Some people prefer to hold the stalk upside down for this, and some use a machete. You'll be left with a 1- to 2-foot-long stalk that's an inch or less in diameter. With your knife, shave or peel off the fibrous outer skin of the stalk. Yes, I know it sounds like a lot of work so far, but I wouldn't be telling you about this one if it weren't well worth it.

With the leaves, flower buds and outer skin gone,

you'll be left with a bright green, moist, hollow tube of edible vegetable. I've eaten them raw at their prime with great joy. If you catch them a little late or when the season is dry, they might have the less sweet flavor of a cucumber. Depending on where your thistle harvest lands on the spectrum of maturity, it may warrant a sauté in butter to enhance flavor and texture. Either way, after your first good meal of thistle stalks, you'll want to befriend bad farmers.



OTHER WILD EDIBLES FOUND IN MID-SPRING

ramps, smilax vine tips, black locust flowers, stinging nettles, trout lilies, dandelions, wild onions, prickly pear pads, basswood leaves, pokeweed shoots, knotweed shoots, giant Solomon's seal shoots, mayapple fruits.



Frank Hyman

Frank Hyman learned his craft from foragers in North and South Carolina, Manhattan, Maine, Quebec, Catalonia, Provence, Tuscany and Umbria. He teaches chefs, farmers and wannabe foragers. Frank has a degree in horticulture, cultivates wild edible plants and makes over \$100/hour selling wild mushrooms to restaurants. Learn more about him and his foraging programs at

FrankHyman.com

this'll taste like thistle



FORAGING FOR FORAGERS

The safest and quickest way to learn some of the iffy mushrooms and wild plants is from experts. At EatTheWeeds.com/foraging/foraging-instructors/, Green Deane curates a list of experts all over the country. (If you are an expert and want to be listed, contact Deane directly.) You can also search on Facebook or Meetup.com for mushroom hunters and wild-, edible-plant foragers in your state or region.



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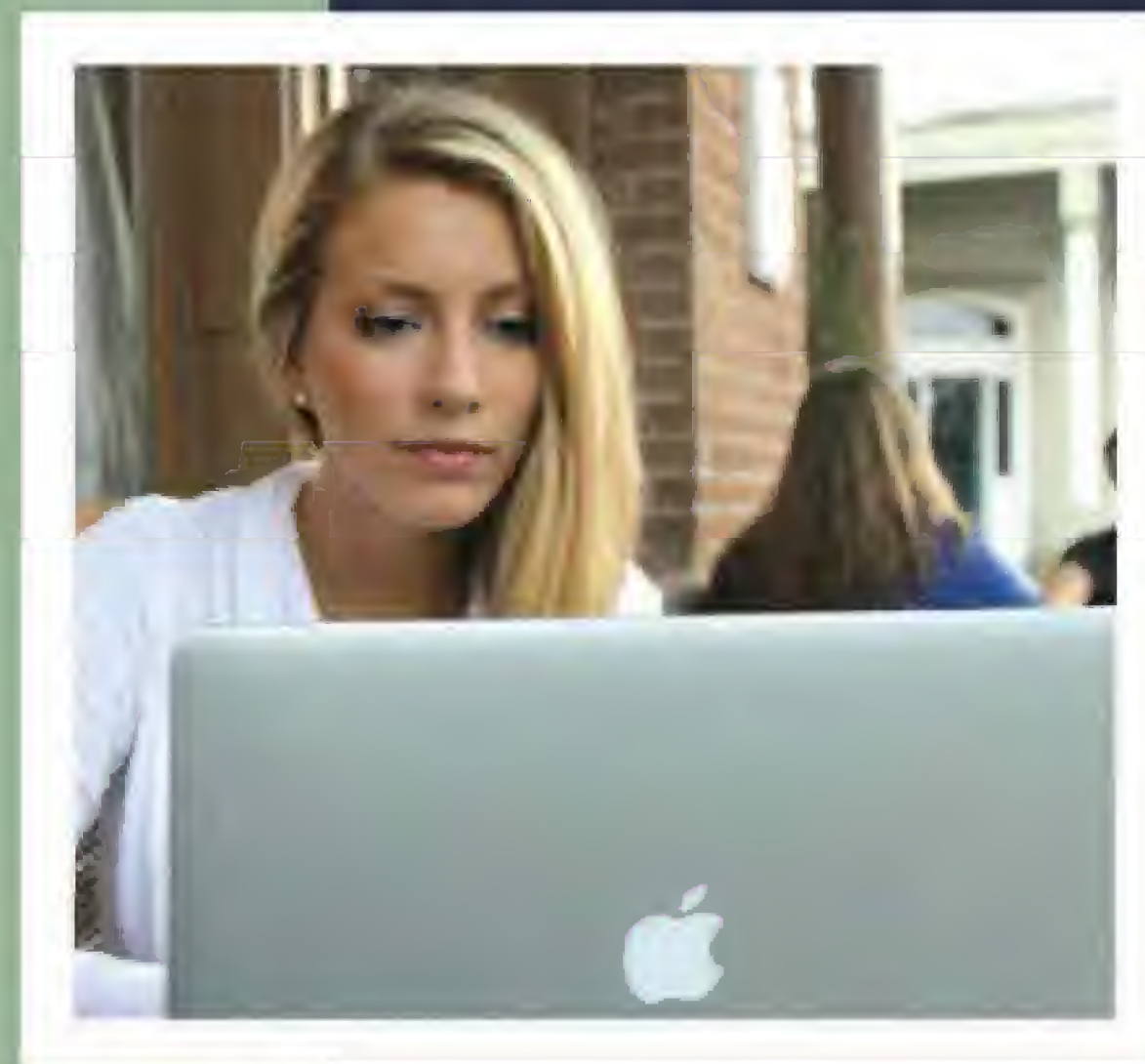
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— with Monica from BravoForPaleo.com —



Why you should **DO A WHOLE30** in college

“ Oh, my God! Have you heard of a tea detox? I'm drinking tea for five days straight, and I will lose weight. Oh, and I have to take a laxative.

If I take this supplement, I can lose 10 pounds before spring break.

Here's this diet where I can eat whatever I want... As long as I work out at least four hours a day. **”**

These statements are real, not exaggerated—they came from the mouths of my fellow college students. I'd like to say that I simply misunderstood them, but unfortunately, I didn't. I have first-hand experience living with a tea-toxer, juicer, supplement taker and exercise-aholic. And the reality is, Taco Bell usually comes before and after these “extreme diets.”

Whenever someone asks me how they can lose weight and really see results, I give them a very simple answer: “Do a Whole30.”

The Whole30 is a 30-day program created by Melissa and Dallas Hartwig, and it will change your life. While there is literally an A-to-Z directory of real-life testimonials from people who have used this program to help with acid reflux, allergies, bipolar disorder and joint pain, the majority of these stories have to do with weight loss. (Go to Whole30.com for all the info!)

In a nutshell, the Whole30 is a strict version of Paleo—“strict” meaning not a bite of bread, not a bite of cake, not one sip of that milkshake. The “no” foods are completely off limits. And if you cheat, well... start over. There are reasons for everything in this program, and you must trust the program if you want results.

“But why do this in college? I just want to lose the weight, Monica. It sounds a bit extreme.”

Here's why.

1) YOU WILL LEARN ABOUT YOUR RELATIONSHIP WITH FOOD.

Do you rely on food for comfort? Maybe there are triggers that make you want to indulge. This program will make you stop and examine the important relationship between yourself and food.

2) YOU WILL LEARN ABOUT FOOD ITSELF.

Until you do this program, you may have never known that there is gluten in soy sauce, or that your favorite sweet potato chips aren't made of sweet potatoes at all. Every label must be read—and hopefully there will be fewer labels and more real food during those 30 days.

3) YOU WILL LEARN TO SAY NO.

No to having a margarita, no to cream in your coffee, no to sugar and no to peer pressure. These 30 days are about yes to health, yes to this journey, and yes to feeling a hell of a lot better.

In college you learn a lot about yourself. Can you keep up with laundry? Make the grades? Pick a career? But I find that the more I challenge myself in smaller tasks, the more confidence I have to tackle those big tasks. This, my friend, is a small task. It's following a 30-day guideline that takes you just a bit out of your comfort zone, so when you get to the big tasks, like taking the MCAT or GRE and deciding on your career, you will know you're capable of anything.

I encourage you to take the challenge, to push yourself a little bit out of your comfort zone. Not only will you survive, but you might just come out of the 30 days with no acne, 10 fewer pounds, and a new perspective on food and yourself.

Here's a testimonial from a very close friend of mine. Keep in mind she was extremely skeptical of Paleo at first!

"During my Whole30, I lost 15 pounds with little to no exercise at all. My skin cleared up, I had more energy, and I learned a thing or two about cooking. I found some great recipes that I now use regularly when meal prepping! Best of all, I learned how I should feel after eating a meal. Energized and satisfied, not sick and stuffed!"

—Claire Harvin, 22

At first, you might be stumped for meal ideas that are totally Whole30 approved. To help you out, here are two of my go-to Whole30 meals—they're super easy and taste amazing! ➡

Chunky Chicken Chili

- 1 TBSP coconut oil
- 1-1/2 lb boneless, skinless chicken breasts, cubed into 1/2-inch pieces
- 2 (14-oz) cans diced fire-roasted tomatoes
- 1 large white onion, chopped
- 1 medium sweet potato, peeled and cubed
- 15 oz chicken broth

Seasonings to taste: Salt, pepper, cumin, onion powder, garlic powder, cayenne pepper

In a medium skillet, heat the coconut oil on medium heat and brown the chicken.

Place all of the ingredients in a crockpot. Stir everything together and cook on low for 6–8 hours. Once cooked, add seasonings to taste.

Turkey-Topped Sweet Potato

- 1 medium sweet potato, cooked
- 1 cup ground turkey, cooked
- Avocado (optional)

Cut the sweet potato in half and top with the cooked ground turkey. If desired, top with avocado and your favorite Paleo seasonings.

Photo Credit: Monica Bravo



“It ain't about how hard you hit, it's about how hard you can get hit and keep moving forward, how much you can take and keep moving forward. That's how winning is done!”
Rocky Balboa



Frank Storey

Inspire

Photography by TS Harrington

Some stories are defined by transformation, while others are defined by inspiration, but for firefighter and CrossFitter Frank Storey, his is a tale of

DETERMINATION.

Frank grew up in Fort Pierce, Florida, a beachside town on the Southeast coast. “There were seven kids in the house,” he recalls. “We played outside, rode three-wheelers, and ate beanie weenies and mac and cheese.” Frank was an active kid, and found his outlet in athletics. He dabbled in wrestling, but when he discovered cross country, he found his calling.

Running gave Frank focus; it gave him a goal. He loved to push himself and fought hard to be the best. The miles of training required calories,

however, and his coaches wanted him to keep his intake up. “I was skinny,” Frank says. “They wanted me to eat.” These were the days of the carbohydrate craze, and runners were at the epicenter of the movement. The pre-race ritual revolved around plates of spaghetti, but despite all the carbs, he still kept his six-pack. “Those days, I could eat anything and still kept a normal weight,” he recalls. “It wasn’t a struggle.”

At the age of 17, and with his parents’ permission, Frank enlisted in the Marine Corps,

and thanks to his high school running habit, the notoriously difficult boot camp running regimen didn’t throw him for a loop. In fact, he gained 29 pounds, weight he attributes to simple chow-hall food and a steady diet of calisthenics. After boot camp, Frank went into active duty, working as a welder in Okinawa, Japan, during Operation Desert Storm. Aside from driving on the wrong side of the road a few times, and eating a live squid, Frank’s time there was uneventful, and when his deployment ended, he moved back to Fort Pierce.

Back in the States and out of the military, Frank’s attention turned to bodybuilding. He began working out daily at a gym called Nature’s Way,

and eventually added over 60 pounds of bulk to his frame. His diet included six full meals a day, in addition to an entire loaf of bread as a snack. “I’d tear the crust off, ball it up and eat the whole loaf,” he recalls. “I was big, but I wasn’t very lean!”

One fateful afternoon, Frank decided he was going to do something he hadn’t done since he was a kid, and attempted to ride a mountain bike off a picnic table. “I slammed into the ground shoulder first,” he recalls. “That pretty much put an end to my bodybuilding career.”

Frank’s injury kept his arm in a sling for nine weeks, but as soon as it healed, he began looking for ways to work out again. With pumping iron out of the picture, he went

back to the basic bodyweight exercises he had learned in boot camp. By this time, Frank was working as a corrections officer, and he'd heard about a competition called the Toughest Cop Alive (TCA). Organized by the International Law Enforcement Games, the TCA contest encompasses eight separate events: a 5K run, the shot put, a 100-meter sprint, a 100-meter freestyle swim, a 20-foot rope climb, the bench press, a pull-up contest and a 200-meter obstacle course. Frank trained an entire year for the TCA, and ended up winning the pull-up and rope climb portions of the event.

Encouraged by his results, he immediately started preparations for the following year's event, but during an afternoon practice, disaster struck. He had set up an obstacle course in his neighborhood, which included a wall that he used to vault over. On every other day, the ground behind the wall was flat. On this day, there was a hole. By the time he leaped over, it was too late to change course. Frank's ankle rolled to the outside, and although he didn't realize it at the time, he had suffered an "eversion" sprain.

Also known as a medial ankle sprain, the injury involves damage to the deltoid ligament on the medial (inside) edge of the ankle. Eversion sprains are rare, as the leg bone itself usually breaks before the deltoid ligament does. "I was in a walking boot for three months before I could even start rehab," Frank recalls. "It probably would have been easier if I had broken my ankle."

Frank spent months working with a physical therapist, doing stretches and ankle rotations, and working with resistance bands. Determined to stay in shape even while rehabbing his ankle, Frank continued to do whatever exercises he could. "I couldn't run," he recalls, "but I was still doing push-ups, sit-ups. I didn't give up."

For several years after his ankle injury, Frank's competitive juices had stalled. He was working out, but in more of a holding-pattern than a focused program. When a friend mentioned that he was taking jiu-jitsu classes, Frank decided to give it a shot and signed up at the American Top Team (ATT). An offshoot of the legendary Brazilian Top Team, ATT is home to numerous professional MMA fighters and jiu-jitsu players. "It's like a chess match," Frank explains. "You solve problems and get excited when you learn something new."

But after several years, and numerous broken toes, broken fingers and injured elbows, Frank decided that it was time to hang up his jiu-jitsu belt. "My son was getting older," he explains. "I wanted to focus on being with him more." At the same time, Frank's career was also going through changes. His sister-in-law was a firefighter, and the pay and benefits were appealing. He enrolled in the Fire Academy, studied hard and landed a spot in the St. Lucie County Fire Department.

By this time, the TCA contest had expanded to include both firefighters and law enforcement officers. Determined to compete again, Frank set his sights on another run at the TCA and began training. When the day of the TCA arrived, Frank completed event after event without incident, until he got to the obstacle course. "At the end of the obstacle course, there is a sprint with a hurdle," Frank recalls. "I went over, and when I landed, my foot rolled to the inside, the same injury as before."

Another long recovery period followed, and with time on his hands, Frank's attention wandered. While searching the Internet one day, he learned about a new workout trend called CrossFit. It piqued his interest, and after gathering together some rusty barbells and homemade medicine balls, Frank was ready to try it.

For the next 12 months, Frank CrossFitted in his garage. Eventually, his firefighter buddies started coming over. They would look up the WOD on CrossFit.com and train together, which got them results for a while. When the group started to



outgrow their DIY equipment, Frank decided to sign up at a local box called CrossFit Fort Pierce.

"That first workout whipped my ass," Frank recalls. "I did FRAN and thought I was going to die at the end of it, but I kept coming back." He was sold on the social aspect of the gym, the friends he made and the positive, encouraging atmosphere. One of his personal mottos is "Hang out with people you want to be like," and at CrossFit Fort Pierce, Frank found kindred spirits who could match his own drive and intensity.

It was at his CrossFit gym that Frank also learned about Paleo. "I was drinking diet Monster drinks, coffee with sugar in it, and I cut all that out," he recalls. "The first week was tough, but you get used to it." His nutritional regimen focused on eggs, almonds, fish, chicken, steak, asparagus and sweet potatoes, and he quickly began to see results. "Your clothes get looser, your insides feel good, you sleep good," he says. "I feel great now."

In typical Frank fashion, CrossFitting alone wasn't enough to scratch his competitive itch. He enlisted in the National Guard and, at the age of 44, competes against 20-year-olds in the annual Army Physical Fitness Test (APFT). "They have us do a 2-mile run, sit-ups and push-ups," Frank says. "These guys are quite a bit younger than me, and I should probably be retired at my age, but I've had the best PFT score in my unit the past few years."

Frank's family also has a competitive streak. His 14-year-old son CrossFits, wrestles in school and is an ATV racer. Frank's girlfriend, who he nicknamed "Linda Carter" after TV's Wonder Woman, is also a CrossFitter.

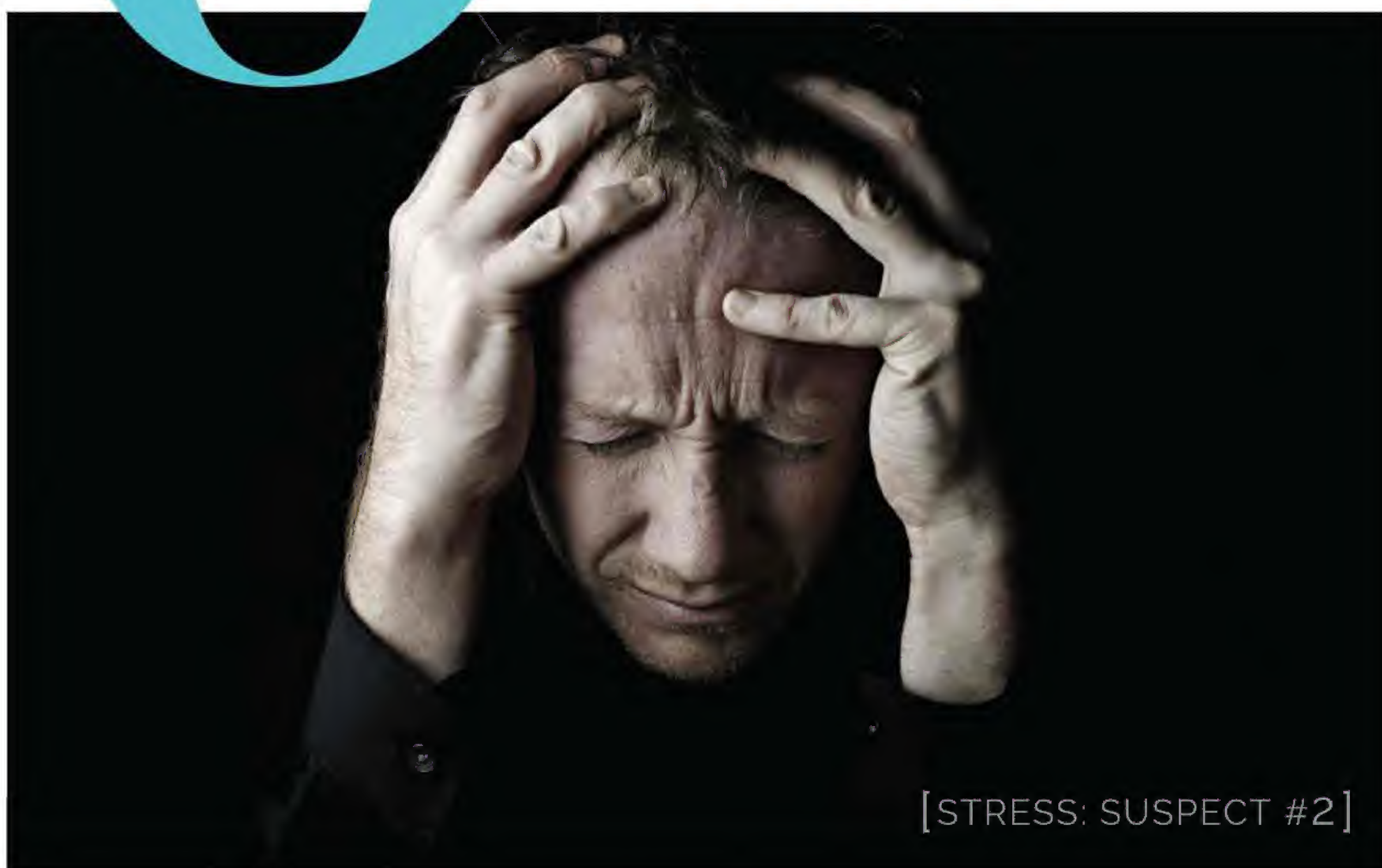
When asked why he trains as hard as he does, Frank says, "It's not for looks. I want my son to be able to look up to me and know I'm going to be there for him."

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6 non-dietary

REASONS YOU'RE NOT LOSING WEIGHT



[STRESS: SUSPECT #2]

You've been told time and time again to count your calories and make sure you're burning more than you're taking in. That if you're not, then you won't lose weight. And that if you are but you're still not losing weight, then you're not being totally honest, you don't have any willpower or there's something wrong with you.

Of course, this advice is shameful, flat-out false and heartbreaking. There are several other factors that play a role in how your metabolism functions and whether you're losing or gaining weight beyond just "calories in and calories out." I'm a dietitian here to tell you that it's not just about food! **LET'S TAKE A CLOSER LOOK AT SIX COMMONLY OVERLOOKED SUSPECTS IN WEIGHT-LOSS RESISTANCE.** —————>

No.

INFLAMMATION

>>> New research is pointing to inflammation as the root cause of almost all weight gain, and almost all of us have it for one reason or another thanks to stress (daily and chronic), over-exercising, and eating foods that contain trans fats, sugars and chemicals. There are two types of inflammation: acute and chronic. Chronic inflammation is the kind that is low grade and systemic, constantly engaged, silently damaging tissues and increasing your risk of disease while contributing to all sorts of health issues—including packing on the pounds.

Inflammation manifests itself in different ways from one person to another, but your body sees it as a fire and is always going to prioritize taking care of the inflammation before anything else. This means that if you're struggling with losing weight, it's going to be really tough—maybe even impossible—for your body to do so without addressing inflammation first. You can help your body reduce inflammation so that it doesn't have to work so hard at it, and can get on to doing what you want it to do: shed the pounds.

The first step is to stop the damage by removing inflammatory triggers. This means managing your stress, allowing your body time to rest between workouts and doing your best to avoid processed foods. Then, focus on healing existing inflammation by consuming healthy fats like those found in avocados, coconut oil and grass-fed butter, fermented foods like kombucha and sauerkraut, and anti-inflammatory supplements like fish oil, probiotics and L-glutamine. Last but not least, keep in mind that patience and consistency are extremely important. Just like chronic inflammation doesn't set in overnight, it doesn't heal overnight, either. Give your body time to do its job and be sure to support it along the way.



No.

STRESS

>>> Stress can sabotage even the best eating and exercise regimens. Being stressed out can cause your body to store fat, even if you don't

eat any more, any less or any differently. When your body is constantly in a state of distress, you can gain weight as a result, no matter how well you're eating or exercising. This is because of cortisol—your “stress hormone”—which is released by your adrenal glands in response to stress. Cortisol raises your blood sugar levels, which causes your pancreas to release insulin—known as your “fat-storing hormone”—to bring the sugar to your cells to be stored as fat.

Unfortunately, when you ask most people if they're stressed, their answer will be an automatic, exasperated “YES!” While many realize it's not fun to live with the burden of stress, most of us brush it off like it's no big deal. Today's demanding lifestyles put more stress on our bodies than they were designed to handle. Too often, we rush from one thing to the next, and we can become worn down from the stressful daily grind.

The good news is that we have the power to manage this stress. Implementing stress-management techniques is important to keep you on track with your weight-loss goals. Try giving yourself 10 to 15 minutes of transition time between your workday and your evening to read a book, do some journaling, go for a walk, practice yoga, take a bath or just sit quietly. Making the choice to relax for a few minutes each day is a good first step to managing stress and shedding those pounds.

SUPPLEMENTS

>>> Supplements can boost your metabolism by filling nutrient gaps and supporting your body in reducing inflammation, but your supplements could also be doing more harm than good. Unlike prescription drugs, supplements aren't approved by the FDA, which means that manufacturers can get away with stuffing their vitamins and supplements with additives and fillers that could be harmful to your body and stand in the way of your weight-loss efforts.

A recent study by the New York State Attorney General's office revealed that four out of five supplements on the shelves of popular retailers like GNC, Target, Walgreens and Walmart contained *none* of the herbs and ingredients that were listed on the supplement labels! Instead, they contained a potentially dangerous mix of cheap fillers and mystery ingredients. This blatant false advertising is super scary, because it means the supplements in your cabinet—the ones you're taking to help you shed pounds—could actually be hurting you.

Quality is essential for getting the results you want when it comes to both food and supplements. That's why I recommend pharmaceutical-grade brands of nutritional supplements, which are third-party tested and don't contain additives, junk fillers or artificial sweeteners—just the real, whole nutrients that you would find in real food. These types of supplements support you in your weight loss, while unregulated ones can do the opposite. —>

4

No.

THYROID

>>> Your thyroid is a butterfly-shaped gland in the back of your neck, and it's got a big responsibility as the master of your metabolism! If your thyroid function isn't up to par, your metabolism won't be supported, which is essential for shedding the pounds.

Low thyroid function (hypothyroidism) is all too common, and underdiagnosed. We see hundreds of clients struggling with their thyroid—many of whom don't know they are battling it, because when they have it tested, their lab numbers might come back in the "normal" range.

Signs of impaired thyroid function can include weight gain, hair loss (especially eyebrow hair), chronic fatigue (even with good sleep), swollen eyelids, a puffy face, frequent sickness, mood swings, mental fog, anxiety, irregular periods, cold hands and feet, constipation, low libido, and dry skin, hair and nails.

When it comes to lab testing for your thyroid, doctors often only run the TSH and maybe the free T4 test, and then send you on your way if these tests come back "normal," without doing a full investigation. To fully assess your thyroid function, I recommend a full comprehensive thyroid panel, including TSH, free T4, free T3, reverse T3, thyroid peroxidase antibodies (TPOAb) and thyroglobulin antibodies (TgAb). Then, have the test results interpreted by a qualified healthcare professional who has experience with thyroid conditions. To further support your thyroid, it's a good idea to also avoid soy, gluten and fluoride, and to be diligent about following your anti-inflammatory Paleo eating regimen.

GUT HEALTH

>>> Gut health isn't just about gas, burping or emergency bathroom trips—there's much more to it than that! Practically everything is tied to the gut, including your weight. The old saying holds true: "Health begins in the gut." When it comes to evaluating why you may be seemingly doing everything right and still not losing weight, an often overlooked starting point is the gut—where digestion, absorption and elimination all take place. You can eat all of the right foods, but if you aren't digesting them properly, you aren't going to see the progress you want. Eating healthy food is only half of the nutrition story. It's critical to be in the ideal state to digest food, too. A lot of us have impaired gut health as a result of our stressful lifestyles, antibiotic use, lack of sleep or taking poor-quality supplements.

You can kick-start your gut health with three key supplements: probiotics, L-glutamine and fish oil—the same ones that help calm inflammation. The amounts will vary based on your individualized health, but a general starting point is to take all three before eating, three times a day.

5

No.

[NO ALCOHOL]



MORE SUSPECTS

> A **LOW VITAMIN D STATUS** could also be a missing piece of your weight-loss puzzle. Aim to keep your level within 50 to 80 ng/ml. Supplementing with 2,000 to 5,000 IU of vitamin D3 every day is what it takes to keep most people's vitamin D levels in the normal range.

> **ARTIFICIAL SWEETENERS** can prevent weight loss, likely due to interfering with, thus slowing down, your metabolism. I recommend staying away from sugar substitutes and turning to the plant-based sweetener stevia as a better alternative.

> **ALCOHOL** makes your liver focus on metabolizing it, which in turn puts fat burning on the back burner. Take a break from the booze if you're serious about your weight-loss goal.

> **HORMONES** are another non-food factor that can affect your weight. When your hormones are in harmony, your metabolism is supported. When they're out of balance, it can cause you to gain weight. Work with a hormone specialist if you haven't ruled this factor out!

> Keeping your **BLOOD SUGAR LEVELS** stable allows your fat-burning hormone, glucagon, to do its job. Make sure you're consuming healthy fat and protein along with carbs at every meal and snack for optimal blood sugar stabilization!

> While there are many non-food factors, **FOOD SENSITIVITIES** could be at the root of your weight-loss difficulties, too. You don't have to have a food allergy to be sensitive to a food! Be sure to explore and rule out foods you may be sensitive or allergic to. Going through the process of elimination while working with a professional is your best bet.

No. 6

SLEEP

>>> Sleep is another non-food component that can affect our weight. Sadly, inadequate sleep is all too common thanks to our busy, chaotic schedules. In fact, sometimes sleep may seem like a luxury. If you don't get enough sleep, you face bigger concerns than just moodiness or fatigue. Research suggests that a lack of sleep can cause insulin resistance and hormonal imbalance, and it also plays a key role in immunity—all of which you need working in your favor not only for staying healthy, but to lose weight, too.

Too often, people who are seemingly eating all the right foods at the right times still find themselves tossing and turning all night. Or they're sleeping well, but only for five or six hours a night. Or they're sacrificing sleep for exercise—staying in the “calories in and calories out” mindset, which, frankly, doesn't keep the pounds off. Giving up ZZZs for exercise can interfere with your hormonal balance, which is critical for weight loss. It's counterproductive to lose sleep in an attempt to spend more time on the treadmill, when simply snoozing more can help you shed pounds.

If you have trouble sleeping, try having a bedtime snack consisting of mostly fat and some carbohydrate to help stabilize blood sugar and promote restful sleep. My favorite is a small cup of frozen berries with a few spoonfuls of coconut milk, or a pear sautéed in coconut oil. Another easy one is carrots dipped in guacamole. For those of you with extreme difficulties falling and/or staying asleep, supplementing with magnesium can be really helpful, too.

So there you have it: six non-food-related suspects that could be standing in the way of your weight-loss goals. You now have some leads to further investigate so you can get on track to shedding those stubborn pounds! 🐾



Dietitian Cassie is a Registered, Licensed Dietitian and CEO of Healthy Simple Life. In her #1 international best-selling book, *Why Am I Still Fat? The Hidden Keys to Unlocking That Stubborn Weight Loss*, Cassie reveals more of the never-talked-about elements that are either helping or hindering your weight-loss battle.

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Diana Rodgers

YOUR GARDEN'S **MASSIVE** BANK ACCOUNT

PHOTO BY HEIDI MURPHY

As you consider your vegetable garden this season, now is the time to consider the health of your soil. Think of your soil as a massive bank account. You can't keep withdrawing from this account year after year without making deposits. Our withdrawals are crops, and our deposits are minerals and organic matter in the form of animal inputs and compost.

Soil is the foundation of an organic gardener's success, and you can't grow good crops unless you have good soil—end of story. Chemical fertilizers give conventional farmers a much better chance of success growing in poor soil, while organic crops grown in poorly managed soil tend to be small, misshapen, diseased and riddled with insect damage.

Soil is an incredibly interesting, endlessly complex subject. Scientists are far from understanding all of the complex interactions that occur in it. However, one thing that's well understood is that without soil, there is no human life. There's still no agreed-upon scientific definition of "soil," but for our purposes, we can think of it as a growing medium that is required in order to grow crops.

This growing medium is composed of:

The parent material, made of sand, silt and/or clay. This is the anchor for the plant roots and a magnet to which nutrients cling.

Organic matter—living organisms as well as dead ones. This material holds on to water like a sponge, houses beneficial microbes and sops up fertilizer.

Air space, which allows roots to breathe.

When it comes to soil, growing crops can be thought of as a really slow, inefficient mining operation. A farmer comes along, digs up the grass or clears the forest, and then sows seeds. The seeds germinate and grow into plants. As the plants

One thing that's well understood is that without soil, there is no human life.



PHOTO BY HEIDI MURPHY

Things you can put in your compost.

grow, they use their roots to find the minerals and water they need within the soil. Once the plants are mature, the farmer removes them from the field. All of the minerals, nutrients and organic matter that the harvested plants drew from the soil are now gone—they've been mined out of the soil. While the amount of material each plant takes from the soil is minute, as this process is repeated year after year, generation after generation, the soil becomes depleted. As responsible growers, our job is to return those mined nutrients to the soil.



Blood, Bones and Poop

The composition of the parent material that dominates your soil depends on where you live. Chances are, if you live in the South, you have a clay soil. If you live near a river, you probably have a silty soil. On our farm in the Northeast, we have a lot of sandy loam. Some parent material is more beneficial for plants than others, and

while you can't change the parent material of your soil, you can improve your soil's fertility by adding organic material.

By far, the best organic material to add to your soil is derived from animals, whether it's composted manure, dried blood, bone meal or best of all, the manure left by living animals rotating through your garden. Consider the soil of the Midwest, one of the most fertile soils in the world. Americans did not invent this soil. It is not a product of our work ethic or ingenuity. It developed over thousands of years through a symbiosis with herds of large herbivores, which migrated through the plains of the Midwest,

grazing on the wild grasses, leaving their droppings behind and ultimately dying on the plains. This symbiosis between herbivore, grass and soil provided the soil of the Midwest with a fertility that has lasted many generations.

On our farm, we plant a cover crop such as oats on our vegetable beds in the fall and allow the animals to graze through, which fertilizes the soil. After the animals eat down the crop, the cover crop's roots help keep the dirt in place over the winter, cutting down on soil erosion. We also compost dead animals, so the soil gets the minerals from their bodies. If you are not able to have animals such as chickens, sheep or goats rotate through your vegetable garden, use composted manure and bagged organic fertilizers that contain blood meal (dried blood), which contains vital nitrogen for your soil, and bone meal (steamed, ground bones), which provides phosphorus and calcium.



The biggest problem commonly seen with home gardeners is exhausted soil. It's been worked intensively for years and is simply depleted of minerals and nutrients. In response to dwindling vegetable yields, the gardener adds more and more fertilizer, but yields continue to decrease and disease continues to increase. The solution? Let the exhausted soil rest!

Since Biblical times, farmers have been preaching the importance of a fallow period that lasts one or two seasons. While the land is resting, though, it can still be productive. At our farm, we seed fields that will lie fallow with a pasture mix of grasses and legumes, and we allow the animals to graze on them during the growing season. This has three benefits: It keeps the fields generating income, feeds our sheep and goats, and fertilizes the soil with the animals' manure.

PHOTO BY DIANA RODGERS

Sheep and mobile chickens in the fall, cleaning up the crop fields and fertilizing at the same time.



Compost System

The compost system you use really depends on where you live, although in all compost systems, the ratio should be about 30 parts brown (dead leaves, straw, old hay) to 1 part green (kitchen scraps, manure, grass clippings). Many sources say the ratio should be 3 parts brown material to 1 part green, but in most situations, this will create an anaerobic environment—which means a stinky mess for the backyard homesteader. The ratio doesn't have to be exactly 30 to 1, but the closer you get to that, the more oxygen your compost pile will have, creating a healthier environment for proper breakdown.



Compost is a very effective way of returning nutrients to the land, and on our farm, it's critical to the way we manage our soil fertility. Early in the spring, as we are preparing the soil for planting, we use fish emulsion and bagged organic fertilizer. Compost, however, provides the overwhelming majority of our soil input. We typically apply about 1 to 2 inches of compost throughout our vegetable fields early in the spring. The rest of the year, we build compost piles and turn them, getting them ready to apply to the fields the next spring.

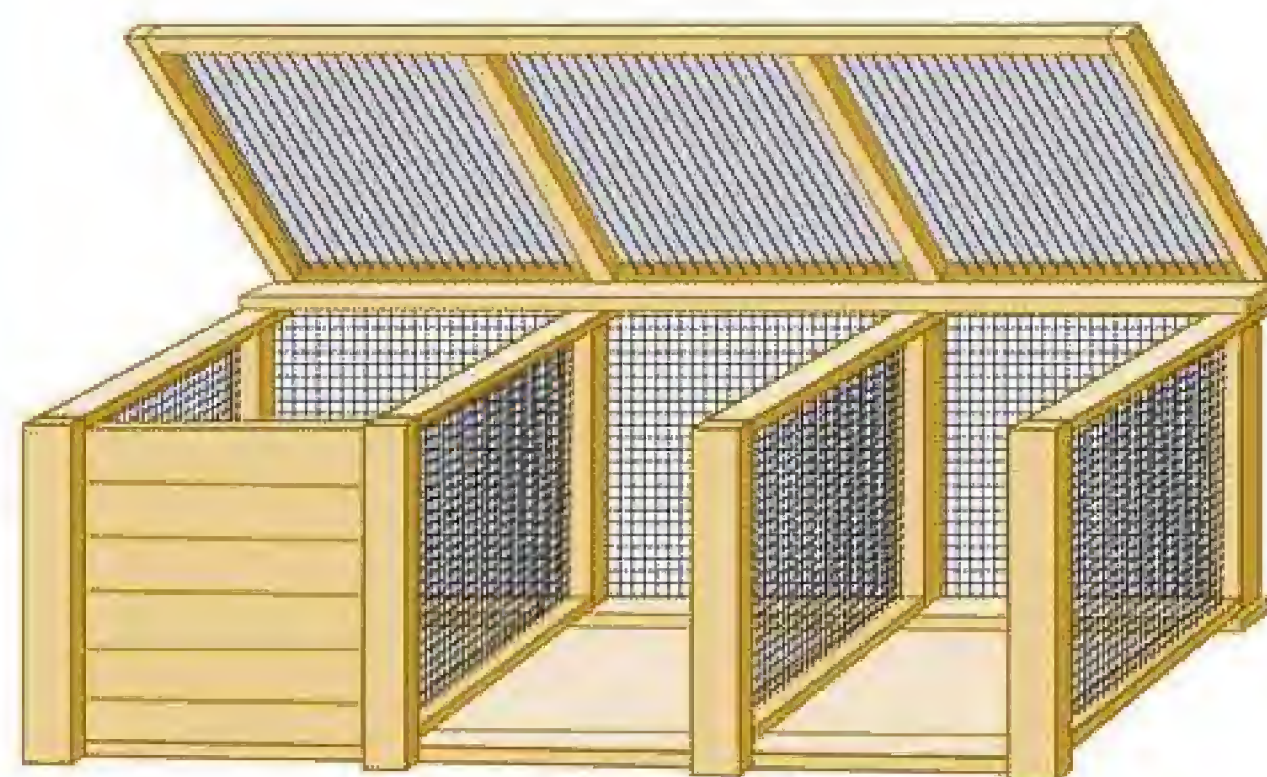
Compost has several advantages over conventional fertilizers and even bagged organic fertilizers. Well-made compost supplies your garden with lots of organic matter, billions upon billions of beneficial bacteria, many different micronutrients, and all of the essential macronutrients for healthy plant growth.

SOME COMPOSTING TIPS TO HELP YOU GET STARTED:



Urban

Some cities make composting easy by offering curbside pickup of compostable materials; you can then purchase the finished compost, which supports the municipal composting system. If your city doesn't offer this, or you want to compost behind your building, consider buying a **compost tumbler**—it's basically a barrel with air holes on the sides and a screw-top lid, and it rotates on a frame. I have tested several, and while they aren't optimal, the fact that they're small and have a lid that keeps out large animals may make them the best option in a big city. Be sure not to add animal products to a compost tumbler, as this will attract animals, some of which, like rats and mice, can fit through a compost tumbler's air holes.



compost from underneath, which helps adjust the pH and gets things really rocking in the compost pile.

Next, spread several inches of brown material, then add about an inch of green material on top of the brown. Continue to layer brown and green material in this fashion until you have used up your green material. The final layer

should be a thick layer of brown material. Sprinkle water over your finished compost pile to get it wet. Depending on the time of year, the pile will shrink.

In about four weeks (depending on the temperature and how active your compost pile is), the pile will be about one-third the size of the original pile or smaller. This is when it's time to move it to the second bay. With a pitchfork, transfer the "cooked" compost from bay 1 to bay 2. Mix up the contents of bay 2 well. The compost in bay 2 can stay there until a new batch of compost is ready to be moved from bay 1 to bay 2; at that point, move the pile from bay 2 to bay 3.



Suburban


The three-pile system is a great way to produce compost without creating a mess. Build a container with three bays: The first bay is for new material, the second bay is for material in the cooking phase (nothing should be added to it) and the third bay is for finished compost. Be careful about adding animal products to this system; this can draw raccoons, rats and other pests. Because the volume of material is small, it's difficult to keep food scraps buried in each pile. Adding chicken wire to cover the bays can help keep pests out.

To start your three-pile compost system, make sure you have enough material to get the compost cooking quickly—about 90 gallons of brown material (a pile roughly the size of a kitchen island) and about 3 gallons of green material. Sprinkle a dusting of high-calcium lime on the ground in the first bay; worms will bring this up into the



Rural

If you live in a rural area and have a lot of space—at least 70 by 70 feet—I like "windrow" composting, in which compost is heaped into very long, narrow piles—called, unsurprisingly, windrows. The shape and surface area of the windrows creates the ideal conditions for decomposition. Start by accumulating compostable materials in a holding area. When you have enough material, mix it all together and pile it in a windrow that's about 8 feet high and 12 feet wide; that provides the optimal surface area while still allowing the pile to heat up. The windrow can be hundreds of feet long. The pile should be turned at least once a month. (We use a bucket loader for this job.) All compostable materials can be added to this system, even animal products—when we find a dead chicken on the farm, we add it to the compost pile. The bones and blood from the animal add precious nutrients to the compost.

Your garden's wealth lies in its soil. With some proper planning by adding "deposits" to your soil's bank account, your summer garden vegetables will be prolific. Every year, your goal should be to deposit more than you withdraw. This is the only truly sustainable method for raising crops. For more tips, visit SustainableDish.com and sign up for my newsletter to receive a free copy of my e-book *Growing*, with all the tips you need to get started with vegetable gardening. 

5 Ways to

Make Coping Mechanisms Your Friend, Not Foe



Madelyn Moon



NEXT TIME YOU FEEL THAT RUSH OF NEGATIVITY, TRY OUT ONE OF THESE COPING MECHANISMS FOR A CHANGE:

Once upon a time, something happened that didn't make you feel good. In fact, it made you feel awful. As a form of protection, your instincts searched for ways to cope with the pain, regardless of whether it was emotional, physical, mental, financial or spiritual. Your body realized that this method worked—it momentarily distracted you from whatever it was that you wanted to flee from, and as a result, you experienced short-term satisfaction.

The tricky part is when the coping mechanism becomes something harmful for you in the long run. At one point in time, your body was actually trying to protect

Control is a myth. None of us have it, and none of us ever will. However, while nothing is entirely within our control, being the type of creatures that we are, we constantly search for a feeling that will at least make us believe that we are.

Eating disorders and alcoholism are only two of the limitless possibilities of dangerous coping mechanisms. Love addiction, stealing, substance abuse, lying, cheating and many more issues are running rampant in our society, as we search for ways to make ourselves feel less fearful. Ironically, these patterns are what promote fear in the first place. These coping mechanisms come from a

accepted the inevitable, and they trust that everything happens for a reason. It's not always smooth sailing, but learning how to surrender will at least draw more peace and happiness into your life because you don't feel like you are the one who always has to be in control of everything. You've given up that responsibility.

As a result of learning how to surrender, you can also begin to learn new coping mechanisms that uplift you instead of limit your capacity for joy. Coping mechanisms can be used as wonderful, inspirational tools that can bring you long-term satisfaction instead

just short-term relief. When I started to recover from my eating

CONTROL IS A MYTH. NONE OF US HAVE IT, AND NONE OF US EVER WILL.

you from whatever pain, fear or rejection you were experiencing by giving you a method of distraction. The problems begin when this form of distraction becomes routine, and you rely on these unhealthy coping mechanisms more regularly to bring you a false sense of control.

place of fear, not love, and as a result, they promote and accumulate more fear.

On the other hand, there are people who have learned the beautiful art of surrendering. Those who surrender, instead of control, have the ability to act, think and feel out of love. They have

disorder, I spent a lot of time focusing on creating new coping mechanisms for myself so that when times got tough, or a rush of fear washed over me (which happens to us all), I had a new plan of attack, and it was one that would leave me feeling alive.

VISION boarding

Vision boarding is a form of visualization and meditation. What is it that you want in your life? Where do you want to be in a week? A year? Five years? If you don't know, that's fine, because the entire purpose of vision boarding is to help you figure that out. I love vision boarding in moments when I feel too stressed to function, because it helps me to focus on the endless possibilities that await me. Instead of turning to something harmful and negative, focus on all that's right and wonderful with the direction of your life.

Going for a walk can be cathartic in more ways than one, depending on what you do or think about during the walk. When I take walks in moments of stress and fear, I listen to either a motivating podcast about self-care, a sermon or a fictional audio book. Coping mechanisms are great for distracting us from whatever it is that's trying to pull us down in life, so you may as well distract yourself with a great story or message. You can also take out your four-legged friend on your journey for an extra dose of joy, as dogs have a natural gift for brightening the mood. Lastly, you could invite a friend and make it a "gratitude walk." Talk about all of the things you are grateful for in your life right now and then talk about the things you desire in your life, speaking about them as if you already have them. It's easy, but effective.



I'm not talking about "exercise," necessarily—just movement. How can you move your body in a way that brings joy? Maybe you've been doing the same old routine for so long that you forgot movement is supposed to be fun. Try something new like rock climbing, bouldering, kickboxing, Brazilian jiu-jitsu, dance, hot yoga, swimming, a spin class, aerial yoga or wrestling. There are endless ways to move your body, so you should never feel limited to just one thing. Just start moving in any way that you desire, and you'll surely feel your endorphins start to rise.



simplifying and CLEANING OUT

Sometimes, when your life feels like it's getting a bit too cluttered, what you really need is a literal cleanout. How we live is extremely intertwined with how we present ourselves to the world. Do you feel like you are accepting too much junk into your life? Maybe it's because you have too much junk in your home. Go through your entire house and start to simplify each room one by one. Look at every item of clothing, every kitchen appliance, every piece of bedroom furniture, every gadget and toy, and decide what truly brings you happiness and what doesn't. If it doesn't make you feel like your authentic self, then get rid of it. Believe it or not, this is something you can do pretty often, as clutter can sneak up on a daily basis.

It goes without saying that one of the most important things you can do is find somebody you can confide in whenever you need to. Everybody needs that friend who will pick up the phone and just listen without constantly trying to add value to the conversation or changing its direction. Find that person for you, and include them in your life when moments of stress rise to the surface.



These are just a few of the powerful coping mechanisms you can lean on when you feel stressed, fearful and worn out. At first, it may seem challenging to make these transitions. Remember to have compassion toward yourself as you make changes. There is no right or wrong way to cope with stress, and there are surely ways that are beneficial to you both in the short and long term!

A Q&A with Ron Mirante, Owner of Bone In

PHOTOGRAPHY BY RON MIRANTE



Ron and his wife, Virginia, at the Rummage and Ruffage market in Hoboken, N.J.

RON MIRANTE'S DREAM OF TRAVELING THE WORLD AND HELPING OTHERS WAS SIDELINED BY A SUDDEN ILLNESS, GALVANIZING HIS NEED TO DEVOUR BOOK AFTER BOOK ON PROPER NUTRITION AND THE PALEO LIFESTYLE.

Now, Mirante is helping others through Bone In, his New Jersey-based prepared-foods business that focuses on local, fresh and sustainably raised ingredients. Mirante hopes to not only inspire individuals to eat clean, but to encourage other businesses to adopt environmentally sustainable practices.

Tell us about the sustainability aspect of the business.

MIRANTE

This is the core of our business. I am very adamant about poor quality and excess waste. We work with sustainable farmers who only use the most natural practices to raise their livestock and produce. We vet the farmers we work with to be certain that they are providing what they claim and not using keywords like "grass fed," "free range" or "organic" as marketing tools. Our farmers really emphasize the importance of multi-layered farms, and use all-natural practices with a focus on establishing and maintaining the most nourished soil ecosystems—the beginning and end point to the entirety of our energy sources.

Supporting local farms and knowing your farmer is

Fresh-made beef bone broth served at farmers markets and through the Bone In Buyers Club.



PM

What is Bone In?

MIRANTE

Bone In is a knowledge-based food service. We work with local, sustainable farmers and prepare foods with their products using all clean ingredients. We are Paleo driven, but also try to influence people who are discouraged by diet trends. For additional convenience, we bring our farmers' provisions, as well as our prepared foods, to the doors of our buyers and/or pickup locations in Jersey City and Hoboken. Our mission is to supply our buyers with enough foods to be able to really focus on eating healthy and clean more often. Working directly with the farmers provides guaranteed freshness, affordability and the additional incentive of never having to worry about waste.

so important for the growth of community, as well as the health of the surrounding environment. Smaller farmers using more sustainable practices can help bring soil ecosystems back to life that have been depleted for decades by monoculture practices and the use of pesticides and herbicides. Economically, if people begin to support local farmers, less is being spent in stores feeding conglomerates' pockets that determine and dictate many of the environmental, economical and political decisions faced in this country and even around the world. The world needs food, and people need their health. This should be in the hands of all the people, not just the industry giants.

The world needs food, and people need their health. This should be in the hands of all the people, not just the industry giants.

PM

Do you really waste close to nothing?

MIRANTE

In just about 18 months, we have yet to dispose of any food. We order just enough each week to ensure freshness and meet demand. We are a business grown by the community, so the higher the demand, the more we order. We use all animal parts for stocks and broths, the way our ancestors used to. We use stems from our greens in our stocks, as well. Nothing gets disposed until it has fulfilled its role.

You can only accomplish this with a grassroots movement and sticking to a community-based model, instead of trying to feed the nation. We limit our menu to a few items, using mostly seasonal produce. We cook with what our farmers can provide. Being that this started as a business cooking for ourselves and our friends, we also eat, share or donate what we do not sell.

We would rather tell people we have sold out than throw anything in the trash. We try to think of it in a more unorthodox way: To dispose of something is a lost expense and not a loss of revenue. Think smaller and minimize your expenses before thinking big and trying to maximize your revenue. This will help develop concrete systems that can help carry your business into the future and to a point you are comfortable with.



Beef and Butternut Chili, made with all locally sourced, sustainable ingredients.

PM

What are your favorite dishes to prepare?

MIRANTE

We really enjoy preparing our stews. We make 24-to-36-hour simmered beef and chicken bone broths, which we use as their bases. With these, it is easy to make something taste delicious, and it excites us to know that we are serving the healthiest of foods that we consume today.

To feed the good bacteria in our microflora, we provide fermented foods (natural probiotics) like kimchi, sauerkraut, beets and pickles. This is another preparation we enjoy because of the immense health benefits it provides for our buyers.

PM

What motivated you to start the company?

MIRANTE

I was diagnosed with a rare autoimmune disease called adult-onset Still's disease with acute pericarditis about two and a half years ago. It almost took my life and was a very rough battle for my wife and I for many months. After being on prescribed corticosteroids and other body-deteriorating drugs for over a year, and numerous attempts to wean off them, I sought a more natural approach. A nutritionist and acupuncturist convinced me to focus on the permeability of my gut in order to reduce the inflammation in my body that was slowly killing me. Once I started reading about it, I knew it would take a lot of work to fulfill. The information was so astonishing because most of it was hypocritical and redundant, biased health facts marketed throughout most of our lifetime. I decided to stop everything in my life and not only supply my wife and I with these nourishing foods, but also the people in our immediate surroundings. In short, with the time needed to eat this way, I was only going to be able to take care of myself through these foods by constantly surrounding myself with them. What better way than by creating a business to help others?

Kathryn Corazzelli



PM

What do you hope to accomplish as you move forward?

MIRANTE

Our mission is to help impact the direction of the food and health industries. We want to encourage people to pay more attention and more time preparing the foods they eat. We want to simplify this for convenience and affordability, as we are aware that these days, people's time is limited and financial priorities are astray. To accomplish this, we aim to provide them directly with all the necessary tools to eat clean more often.

We also hope to encourage other businesses to think differently about where they source their food. We hope they decide to help farmers working tirelessly to fight an agricultural industry that has been politically and economically dictated for too long.

Get more info on Bone In by visiting BoneInFood.com.



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Renee Mollanen

Homebirth

If early man were to stumble upon a modern birth, he would hardly recognize it: a woman lying in a hospital bed with an intravenous line in her arm and a heart rate monitor on her belly, an army of doctors and nurses scrutinizing every contraction, surgical tools at the ready. He might assume he were witnessing a medical emergency rather than a natural life event, and he wouldn't be far off. Birth today is often treated as a medical pathology, and this approach has long-term implications for the health of women and babies. But it doesn't need to be that way.

When I had my boys, the births unfolded in the comfort of my own home. I could eat, move around in labor, use the tub, sit, squat or stand—whatever my body naturally wanted to do. And when they were born, with the help of a certified midwife, they went straight into my arms, where they began to breastfeed right away, setting the stage for a lifetime of good health.

My choice to birth at home puts me in the minority, but the stigma of delivering outside a hospital is fast disappearing. Although less than 2 percent of American mothers have their babies at home, this percentage is up roughly 55 percent since 2004 and increasing every year.¹

For Paleo adherents who want a more natural existence outside the industrialized medical establishment, homebirth is a seamless fit. At home, you're free of a hospital's often-arbitrary restrictions on what you can eat or how you can move, able to follow your body's and your baby's cues. Birth is seen as what it is—a natural physiological process.

As far as safety, homebirth is on par with hospital birth if you have a low-risk pregnancy and use a qualified midwife. A 2014 study examining nearly 745,000 births in the Netherlands—where homebirth is more common—found no differences in maternal or neonatal outcomes among women who birthed at home versus in a hospital, a finding supported by numerous other studies.²

Homebirth also has other benefits to help promote healthy moms and babies well past delivery day:

#1

You're less likely to wind up with unwanted—and often unnecessary—interventions.

Women with planned homebirths are significantly less likely to end up with epidurals, episiotomies (cutting the perineum), oxytocin to augment contractions and forceps, and vacuum deliveries. These interventions often lead to longer recovery times, which may interfere with bonding and breastfeeding success, and could increase your chances of even more significant interventions, such as caesarean section.

C-sections rarely occur among homebirthers. A 2014 study of nearly 17,000 low-risk women who planned to give birth at home found that 5.2 percent of the births ended in C-section.³ Contrast that to the national average of 33 percent.

Beyond a tougher recovery, which is inevitable for major abdominal surgery, C-sections have longer-term health impacts. Evidence now suggests that vaginal birth is a crucial step in colonizing a newborn with its mother's healthy bacteria. When a baby skips the birth canal, she misses out on these vital microbes, possibly putting her at greater risk for allergies, asthma or illness down the road.⁴ Mothers who have C-sections are also at greater risk for infections, blood clots and uterine ruptures in future pregnancies.

Of course, there may be times when an intervention is necessary, and a qualified midwife can make that call. But the disparity in C-section rates casts doubt on necessity:

Why do one in three women "need" a C-section inside a hospital when only one in 20 "need" it otherwise?



A 2014 study of nearly 17,000 low-risk women who planned to give birth at home found that 5.2 percent of the births ended in C-section.³ Contrast that to the national average of 33 percent.

#2

You have more control.

In a hospital, you're at the mercy of their rules. Many hospitals restrict what you can eat or drink, where you can go and what you can do. These restrictions could disrupt the mental concentration and emotional health needed for a successful labor. Homebirthers reported being more comfortable and in control of their labors at home versus in a hospital, according to a 2015 study in the *International Journal of Women's Health*.⁵ They also reported fewer distractions. The study found that hospital labors were frequently interrupted by unfamiliar staff members coming in and out of the room, contributing to a loss in concentration and more emotional discomfort.

Most importantly, homebirthers report high levels of empowerment, believing they have the ability to make real choices about their bodies and births. Why does this matter? This sense of empowerment translates to more confidence in the normal birth process,⁶ and presumably better outcomes.

#3

You can move.

At home, there are no restrictions on your movements or birth positions, and you can follow your body's natural lead. That's good news because evidence suggests that lying on your back—the preferred position in hospital births—is not optimal for laboring or birthing.

Numerous studies have found that squatting, sitting and all-fours positions were associated with lower risks of perineal tearing and the need for instrumental deliveries.

One study found that women who squatted during labor had fewer forceps deliveries (9 percent versus 16 percent) and spent less time pushing (31 minutes versus 45 minutes) than those in the semirecumbent group.⁷ A 2009 study in the *Journal of Psychosomatic Obstetrics & Gynecology*⁸ also found that women report more pain in the typical supine position. When I had my boys, I walked, dipped in and out of the bath, squatted and sat. Lying down might be more convenient for hospital staff, but the research supports letting women choose their own birth positions. →

#4

You're more likely to breastfeed.

It's hard to overstate the benefits of breastfeeding. Breastmilk is chock-full of the antibodies, nutrients and microbes newborns need, especially in the days and weeks after delivery. Studies have linked breastfeeding to fewer colds, respiratory infections and gastrointestinal illnesses in newborns and reduced risk of chronic conditions, including diabetes and celiac disease.

Breastfed babies are also less likely to become obese and have better overall health than formula-fed babies.⁹

Breastfeeding is good for moms, too, helping naturally to contract your uterus back to shape after birth and reducing your future risk of breast and ovarian cancers.⁹

Breastfeeding success greatly improves in a supportive environment. Women who'd planned to birth at home were more likely to breastfeed exclusively one week after delivery compared to those who had birthed in hospitals (92 percent versus 85 percent), a trend that continued well into the postpartum period, according to a 2009 study in *Birth*.¹⁰

And remember that one in three hospital births ends in a C-section. Women who have C-sections are less likely to breastfeed, studies show.¹¹ That's because there is often a post-surgery delay in getting infants to the breast, thus missing the window when the baby's sucking instinct is strongest. My two boys took to the breast within 10 minutes of entering the world. At home, you'll deliver vaginally and be encouraged to nurse right away, improving your long-term chances of success and paving the way for a healthier baby and you.

#5


You'll be happier with your birth experience.

Overwhelmingly, homebirthers feel satisfied with their births, looking back positively on the labor process and delivery. Why is this important? Your feelings about one birth have an impact on subsequent births. Women who had some sort of intervention in one birth—such as C-section or vacuum extraction—are more likely to fear childbirth. Fear can translate into an increased risk of emergency C-sections in future births, presumably because anxiety produces a hormonal response that leads to longer labors and complications.¹² In fact, negative hospital birth experiences are a major reason why some moms choose homebirth in future pregnancies, avoiding the likelihood of interventions and anxiety altogether.

Homebirth can be an empowering experience, but it requires preparation and a willingness to take charge of your own health decisions. First, be sure you're a good candidate. Homebirth is safe, but not for everyone. If you have pre-existing health conditions, such as high blood pressure or diabetes, or a high-risk pregnancy—twins, breech presentations, fetal abnormalities—your best bet is in the hospital. A qualified caregiver can assess your risk factors and decide if homebirth is right for you.

Most homebirthers choose midwives for this role. The two most common types of midwives are certified nurse-midwives (CNMs), who are registered nurses with graduate-level midwifery training, and certified professional midwives (CPMs), who either graduate from a midwifery school or complete an apprenticeship. You can get more information on CNMs from the American College of Nurse-Midwives and on CPMs from the North American Registry of Midwives.

With so few homebirthers around, finding support is tough. Start with the Midwives Alliance of North America (www.Mana.org) and Birthing Naturally (www.BirthingNaturally.net), which provide general information and state-level resources for aspiring homebirthers.

Women are genetically wired to give birth without medical intervention—we've been doing it for millions of years. Birthing at home can reawaken these natural instincts, empower moms, and give babies a healthy head start in life. 

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“MATURING”



with the Paleo Lifestyle

I haven't always been good at seeing how my present behavior was affecting my future health. Well, maybe I saw it. But I didn't always care. Looking back, some of my choices mattered more than I would have liked.

I spent many summers at the Jersey Shore and tanned like it was my job. Future effects on health and aging? It really didn't matter at the time. After two bouts with melanoma, I wish I could go back and tell my 20-year-old self a few things.

The same goes for the “minor” health issues I faced along the way. I was anorexic before it was even a thing. Just keeping a little weight off, I told myself. So I starved myself for over a year and thought, “No big deal.”

Years of stomach issues, heart palpitations and lack of sleep due to stress were considered just part of life. I went to the emergency room

once with a racing heart and was told it was likely due to stress. Isn't everything, I thought. Didn't slow me down a bit.

I worked hard, worked out hard, raised a family, maintained relationships and carried on with “normal” life, until things started changing. The school I had taught at for 25 years suddenly closed down. The kids were going to college and getting married. My body started hurting. I was turning 60 and got diagnosed with rheumatoid arthritis.

One thing about getting older: The race isn't as important as it once was. I loved everything about my fast and busy life, and never thought about how it was affecting my health. Somehow, everything was going to be just fine. But then it all changed, and it wasn't looking



so fine after all. When my rheumatologist said drugs were my only option, I was determined to find another way.

I have considered this disease, in many ways, my blessing in disguise. Because many changes were all happening at the same time, I couldn't just autopilot my life any longer. And although it has been one of the most challenging times in my life, I am very grateful for the chance to stop and evaluate my choices. I want to move forward into my 60s and beyond as the best version of myself that I can possibly be.

And now I'm very aware that my decisions today affect my health tomorrow. The good news, as those following the Paleo lifestyle know, is that we have a lot to say about how we want to grow older. The sooner we begin, the better. But for those of us coming onto the scene a little later in life, we can begin where we're at and expect great things as we go forward.

There is a wide variety of words used to describe the older population: maturing, senior, elderly, aging. Growing older is one thing; being elderly is another. The word "elderly" conjures up images of stooped postures and shuffled walking. The definition of "elderly" marks 65 as the starting point, and that is a lot closer than I'd like it to be. That word and those negative images are only one perspective, however. The word I am going with is "maturing," and the picture I am focusing on has "strength" and "dignity" written all over it. As with everything, what we think matters.

As we get older, we become less concerned with our body image and more concerned with body function. While maintaining a strong body core is important at any age, it may be even more important for the older population because it is linked to balance, coordination and stability. Our core is the "foundation" for all of our body's movements, whether we are walking, carrying a heavy bag or engaging in a sport.

There are some shocking statistics out there regarding the "elderly," and some that I had never thought about relate to falling. Statistics say that one in three people, once they hit the age of 65, will fall. That number increases with age, and is one of the top fears in older people, not to mention one of the leading causes of hospitalization and death.¹

Fortunately, following a Paleo lifestyle helps us avoid these kinds of problems. For the most part, people who follow a Paleo lifestyle are choosing behaviors that have great benefits for health and longevity. Traditional exercise, like running on a treadmill or riding a stationary bicycle, may provide cardiovascular benefits, but it won't help us regain our balance if we trip on a rug, or make us better at getting unbalanced grocery bags up the stairs. And it won't help us get up off the floor if we do happen to fall.

According to the *Paleo Magazine* website, "Smart exercise is an important component of Paleo. With a ➔



SOME WAYS TO STRENGTHEN OUR CORE FOR BETTER BALANCE AND STABILITY

1. WE CAN INVEST IN BALANCE TRAINING EQUIPMENT, SUCH AS THE BOSU BALANCE TRAINER, STABILITY BALLS AND MEDICINE BALLS.

Each requires finding stability while performing an exercise. For example, a simple squat on the Bosu engages the core muscles to keep us from falling off, which isn't necessary when doing a squat on the floor.

2. WE CAN ENROLL IN A YOGA OR PILATES CLASS, BOTH OF WHICH FOCUS ON BUILDING CORE STRENGTH.

3. WE CAN JOIN A CROSSFIT GYM, which is a core strength and conditioning program that's scalable for all ages and abilities. Most CrossFit exercises—like squats, deadlifts and overhead presses—require the core muscles to engage, being strengthened in the process.⁵

4. WE CAN INCORPORATE THE PLANK INTO OUR WORKOUTS.

This simple exercise stabilizes the spine and keeps it in a neutral position while strengthening the core muscles. There are many tutorials on planking, along with variations to keep it interesting.

5. WE CAN INTENTIONALLY DO THINGS THAT STRENGTHEN OUR CORE AND HELP OUR BALANCE.

We can be mindful of our posture as we go about our day. As we relax the shoulders and straighten the back, we can focus on pulling our belly button back toward our spine. For example, we can put on socks while standing up, lifting one foot at a time, requiring the supporting leg to make any necessary adjustments.



While maintaining a strong body core is important at any age, it may be even more important for the older population because it is linked to balance, coordination and stability.

focus on weight-bearing loads, mobility and lots of slow, sustained movement, we can model the fitness patterns of our ancestors to promote both peak physical performance and longevity with minimal effort.”² If we do what our ancestors did, we are incorporating movement designed to help us grow older with strength, flexibility and balance.

Incorporating movements that strengthen our core muscles is one way to train for stability. Our core muscles connect our upper and lower body. Weak or inflexible core muscles mean our arms and legs are impaired. By enhancing balance and stability, a strong core can help prevent falls and injuries.³

In a study involving 300 men and women 70 or older who had fallen at least twice, researchers from Australia found that incorporating balance and strength-training exercises into routine activities reduced falls among the elderly by nearly one-third. The exercise participants improved both balance and strength, and had enhanced function and participation in daily activities.⁴

According to one of the researchers, “The belief that falls should be accepted and tolerated as part of the aging process is a myth that needs dispelling. Many falls can and should be prevented.” Older people who engage in balance and strength training, increasing core strength along the way, can significantly reduce their risk of falling. If it can help people who are already “elderly” and have experienced falls, starting at a younger age would seem to significantly reduce that risk.

Core muscles allow us to move our bodies to do everyday tasks

and participate in physical activity. Functional fitness is our ability to maintain a fitness level that allows us to complete the tasks we need to do on a daily basis.⁵ If we are functionally fit, we have enough strength and endurance to vacuum the house, rake the leaves, get heavy groceries home from the store or keep our balance on an icy walk.

All of us are moving forward, and every decision we make today has implications for how we move in that direction. The more we can strengthen our core, improving balance and stability, the better prepared we are for our tomorrows, especially as we approach those later years. Strength and dignity belong to those who embrace preparation and make wise choices regarding health and longevity. Following a Paleo lifestyle helps us mature into the best version of ourselves. At any age. 🐾

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From the Doc



Why Paleo?

A Physician's Perspective

I first heard about the Paleo diet around 2009, and over the years my appreciation has grown from an interest in this ancestral way of eating to a newfound look on life. As a physician who is passionate about leading my patients to optimal wellness, Paleo is more than just a diet. It is a lifestyle that presents a foundation of habits, rituals and overall mindset that promotes a more balanced, nutritious and enjoyable way of living. While there are different versions of Paleo (some less healthy than others), there are a few key points that lay out what Paleo really means to a health professional. These include:

- Eating for your genetic makeup and avoiding ingredients that your body doesn't recognize as food.
- Fueling our bodies with the most nutritious foods possible.
- Opting for foods grown and raised as closely to their natural state as possible (direct from farm, grass fed, wild caught, locally grown).
- Getting your body back in rhythm with nature and natural movement.
- Focusing on tribe and family.

Simply put, what makes Paleo the ideal lifestyle are the foundational principles that encourage us to eat, live, sleep and move in the ways we were genetically designed. We were not designed to function on chemically altered "Frankenfoods" and preservative-laden snacks with 10-year shelf lives. We were not meant to sit in front of a computer all day, a television all evening and a handheld device during the times in between. Our bodies are not designed to eat feedlot animals fed genetically modified foods such as corn and soy while being pumped full of hormones and antibiotics.

The fact is, our country's health is in a dire state. We live in a nation where over two-thirds of the population is overweight and over one-third is obese. For the first time in history, the vast majority of the population is actually overfed and undernourished, and despite the fact that we are consuming excessive calories, 90 percent of the population has at least one nutritional deficiency.¹ In addition to being overweight, we are constantly inundated with toxic foods, behaviors, medicines and lifestyle practices, creating a toxic environment in our bodies. It should be no surprise that cases of cancer, mental health

We were not
designed to function
on chemically altered
“Frankenfoods”
and preservative-laden snacks
with 10-year shelf lives.



disorders, gastrointestinal tract issues, autoimmune disorders and disease in general continue to skyrocket.

Fortunately, there are a number of ways that the Paleo lifestyle can positively impact our stressful lives. These include:

- Limiting, or better yet, eliminating genetically modified foods. By cutting out the foods most likely to be genetically modified, such as corn and soy, you can drastically decrease the amount of toxic foods entering the body while creating gaps in the diet that can be filled with more nutritious vegetables, fruits and healthy fats.
- Opting for grass fed, farm raised and locally grown. Fifteen years ago, it was much more difficult to track down a grass-fed beef or free-range chickens. Today, it's amazing how easy it's becoming to find farm-fresh eggs (many people actually raise them in their backyards) and grass-fed beef. As more people opt for these foods, farmers and ranchers will continue to bring them to market. I love the fact that I can support my neighbor's way of life while ensuring that my food is locally grown and harvested. ➔



Simply put, what makes
Paleo the **ideal lifestyle**
are the foundational principles
that encourage us to
eat, live, sleep
and move
in the ways we were
genetically designed.

- **Eating more living foods.** Not long ago, sauerkraut was only found in the inner aisles of the grocery store and packaged in a way that killed every last bit of nutrition, and the vast majority of the population had never even heard of “live and active organisms,” let alone kombucha or kefir. By consuming these probiotic-rich foods, we can help re-establish our gut flora and improve our body’s ability to properly digest food. Better digestion promotes better absorption of vitamins and minerals needed for all systems of the body to function optimally.
- **Saying goodbye to grains.** My favorite thing about Paleo, when properly followed, is that it automatically eliminates gluten and grains. I’ve spent much of the past six years researching the detrimental effects of gluten (and often grains in general) and I’ve come to wholeheartedly believe that just about everyone can benefit from removing grains from their diet. Modern grains (particularly wheat) have been manipulated and processed to promote drastically higher yields and lower nutritional value. And, while we are now able to grow and process much larger amounts of grains at a lower cost, Americans are paying the price with the detrimental effects that these toxic grains have on our health. Compared to antioxidant-rich, anti-inflammatory vegetables and fruits, grains are lacking

in essential vitamins and minerals, and tend to promote inflammation in the body.

- **Disconnecting and reconnecting.** The Paleo lifestyle emphasizes the importance of disconnecting from modern society’s habits, behaviors and expectations, and reconnecting with nature, family and our body’s true needs. So get off the treadmill and walk outside. Step away from the television and catch a sunset. Put the phone down and have a conversation with the person next to you. Step out of the grocery store and into the local farmers market.

As I continue to follow the Paleo lifestyle and use it with my patients, I’m continually encouraged by new ideas and information that can help us consider how to enhance and even lengthen the limited time we have on this planet. As a physician, I believe the Paleo diet is the answer to so much of our nation’s declining health, climbing obesity rate and increasing disease rates. It provides a way to nourish our bodies in the ways they were designed, and provides a template we can use to learn how to thrive in this life rather than simply survive. 🐾

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Why Do You Stretch?

People "stretch" for a variety of reasons, and maybe some don't even know exactly why they're doing it. Some stretch because they think it'll make them a better athlete. Some stretch because they can't exercise without going through their stretching ritual. Some stretch with the belief that they'll prevent an injury, while others stretch because they think it'll help resolve their injury. For some people, stretching is the only exercise they do—it's their complete workout routine.

But perhaps the more important question is, "Why do you feel the need to stretch?" In other words, why are you tight or not flexible in a certain area? Furthermore, if you're able to develop a greater range of motion in that area, is that truly beneficial in some way? How much flexibility should you really have in an area to be fit? How much flexibility is considered healthy? Is a greater range of motion of a muscle or joint better than less? Who decides what is good, bad, healthy, fit and flexible?



Flexibility Means Something

Flexibility might be the main reason most people stretch. To most, flexibility means a fitter and healthier body, though this isn't always true. I ask a lot of my patients what they do for exercise. The average Jane and Joe, who is lucky enough to have some sort of 20- to 30-minute exercise routine a few times a week, will include stretching in their program. They do so because they think, or have been told, that stretching will lead to more flexibility, and that this in turn equates to a better fitness level. And yes, most people still think that fitness equates to health, so by default, the more they stretch, the healthier they are. Unfortunately, it's all a big lie.

Flexibility comes from the Latin term *flexibilis*, which means "to bend." It's really the ability of a joint to move through its full range of motion (ROM). Full ROM, however, is different for many people. One person might easily be able to put their foot behind their neck, while another can only get their foot to their chest. So who is more flexible? Most would state the obvious, that the one who can put their foot behind their head is clearly more flexible, but that's not necessarily correct. If the person who can only get their foot to their chest is actually getting their joints—in this case the hip and to some degree their knee—through their full ROM, then they might actually be more flexible than the one who can put their foot behind their neck, if that person is actually able to do more than just get to their neck but is restricted from going farther. It's all in how you look at it.

Yes, there are basic human movements we should all be good at. If you only want to walk well, then you don't need the same flexibility in your hips and legs as a gymnast. However, we then get into a very gray area of how much functional ROM we, as individuals who are hopefully striving to be healthy and fit, should be able to achieve in our quest to do more than just walk well.

Flexibility Is Way Beyond Movement

Flexibility might be the ability of a joint to bend through its full ROM, but in actuality, it's a reflection of your nervous system—not simply how much you can stretch. In essence, stretching what is tight or thought to be tight is often treating the symptom

A photograph of a man performing a handstand in a gym. He is shirtless, wearing dark shorts, and has a tattoo on his left arm. He is in a full handstand position with his legs spread wide and arms straight down. The background shows a white wall with two diamond-shaped mirrors and a dark floor.

PART ONE STOP MINDLESS STRETCHING

rather than the cause. Additionally, more ROM in a joint doesn't necessarily equate to a better-functioning nervous system. Typically, it's the balance of flexibility from left to right and front to back that signifies a harmonious nervous system—in other words, symmetry. Or maybe “harmony” is a better way to put it. For example, if you can abduct your left leg 90 degrees but your right leg goes 100 degrees, this doesn't necessarily mean that the left leg is the problem. After performing a certain therapy or therapies, you may find that the right leg is now abducting less, but equal to the left leg—yet it most likely feels less “tight.” The symmetry, as well as the tension, is more important.

If you're under significant physical, emotional or nutritional stress, then your nervous system will respond by tightening certain muscles. That's just how it works. It's sort of like a protective mechanism. Maybe your whole body feels tight and you have a stretching routine to “loosen up” every morning. In this case, there is something affecting your entire nervous system, and the muscles are reacting to whatever the problem

is. As an example, take the classic waking up with a stiff neck. This may be from poor sleeping arrangements, but more often than not, this problem is due to something you ate the night before. Subsequently, this affects your gut and places tension on the lower part of your spine, which essentially applies traction down your cervical spine. So your neck hurts. You're not waking up with a stiff neck because that's just how it is until you stretch it out, and it's not stiff because you didn't stretch before sleep. Sure, stretching might make it feel better, but it's far from addressing the problem.

Hormonal imbalances can also make your nervous system react in such a way that you have muscular tightness and feel the need to stretch. Women who have estrogen dominance (or low progesterone), and men with low testosterone levels may experience a tight lower back and hips due to the influence of the testes and ovaries on the muscles in the pelvic region.

But it goes beyond that. Those who understand Eastern medicine and the meridian system know that your organs have



**SO, YES—GET UP AND MOVE IF YOU’RE SITTING TOO MUCH.
BUT IF YOU DRINK COFFEE, EAT SUGARY SNACKS, DON’T BREATHE AND
HATE YOUR JOB, YOU’LL NEVER STRETCH YOUR WAY OUT OF IT.**

emotions associated with them. This is why you can “get sick to your stomach” or get “butterflies” if you’re nervous. Your main brain is talking to your second brain—your gut. Your emotions can also directly affect your muscles, and that can affect your flexibility. Simply put, you might feel tight and need to stretch because you’re an emotional wreck or not dealing with an emotional problem in your life.

Don’t Just Not Sit

The dangers of sitting have been all over the news in the past couple of years. We all know that the less we actually sit in a chair, the better it is for our health and well-being. Many movement advocates target the shortening of our psoas (our major hip flexors, spanning from the lumbar spine to the top back side of the upper leg) with sitting too much. But these muscles, which some describe as a focal point of structural health, are also associated with our kidneys, fear and breathing.

Your psoas muscles can quickly become contracted and tight if you’re under a lot of stress beyond that of the physical stress of sitting all day at work. Many people, because of the amount of sympathetic stress on their nervous system, experience these tight, shortened flexors. The emotion of fear, even if it’s not readily perceived by the individual, further exacerbates this. Think about it—even if you don’t obviously know something you’re fearful of, your nervous system does. A sympathetic-dominant body is a fearful state—it’s as if your body is ready to fight and trying to survive.

Furthermore, the psoas has fascial connections to your diaphragm—yes that muscle you should be using a lot more than your lungs to breathe! Diaphragmatic breathing is

parasympathetic—the opposite of sympathetic. What do we all do when we’re under stress? We breathe shallowly or hold our breath, of course. The worse our breathing becomes, the tighter our psoas and other muscles become. The greater the frequency of this phenomenon, the more sympathetic dominant we become, which in turn creates more and more tightness. So, yes—get up and move if you’re sitting too much. But if you drink coffee, eat sugary snacks, don’t breathe and hate your job, you’ll never stretch your way out of it.

Human Variations Affect Flexibility

Flexibility is not just a balance of tension and relaxation, but it also takes into account compression. Compression is the impingement of one tissue upon another, such as flesh on flesh or bone on bone, or the body coming into contact with itself with the inability to go any farther. Pelvic angles, femur variations and other anatomical factors will determine, to some degree, how well you do or don’t move in a certain direction. Yes, sometimes there are ways around a structural limitation, but not always. Never forget how unique you are as an individual, and accept that you may have reached a fundamental limit in your flexibility based upon compression rather than tension. Sometimes, you just can’t go any farther.

In the next issue, I’ll discuss stretching as a warm-up and cool-down to exercise; yoga; and how mobility and movement relate to flexibility.

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CAN OUR THOUGHTS AND EMOTIONS AFFECT AUTOIMMUNE SYMPTOMS?

The Mind–Body Connection

I've always believed in the mind–body connection, but never felt it acutely until I developed rheumatoid arthritis (RA). With autoimmune disease comes a hypersensitivity where the body seems to overreact to all stimuli—both internal and external—and it's one of the reasons so many of us develop food sensitivities that the Paleo diet helps address. It turns out that we also become more sensitive to thoughts and emotions. I remember a few months after RA onset, when the inflammation was spreading throughout my body, I lost my temper over something unimportant. I remember fuming with anger, letting myself become more and more upset. A few hours later, I had the most painful flare-up yet. It was a painful yet important lesson that I needed to be mindful about which thoughts and emotions I indulged.

Psychoneuroimmunology is the study of how our thoughts and emotions affect our immune system, and research in this area has exploded over the past decade. Positive thoughts and feelings—like joy, peace and gratitude—send an anti-inflammatory cascade of chemicals throughout our bodies. Negative thoughts and feelings—like fear, resentment, depression and anger—do the opposite, increasing our inflammation and kicking our immune response into a defensive state.

One Woman's Yearlong Mind–Body Experiment

Donna Jackson Nakazawa, author of *The Last Best Cure*, has multiple autoimmune diseases, and at her worst was paralyzed and bedridden. Years of conventional medicine and therapies helped her regain her mobility, but she was left with disabling exhaustion and chronic pain. In partnership with her doctor, she conducted a yearlong experiment into the power of mind–body techniques—meditation, mindfulness and yoga—to help her body heal. The results were dramatic. Her pain and fatigue considerably decreased, her strength and muscle coordination improved, her digestive issues and eczema resolved, and her blood work even showed improvement.

Nakazawa is one case study, but there are several **clinical trials** validating her experience.

Now, we're human beings—we're going to have some negative thoughts and emotions—and trying to be perfect will simply increase our anxiety and set us up for failure, which leads to more negative thoughts and emotions. This isn't meant to strip us of our humanity, but rather to increase our awareness about another way to help our bodies heal. Sometimes we need to cry, and there are events in life where righteous anger is justified. That said, the key is not to dwell on these emotions. Meditation is a way to notice our thoughts and emotions without being consumed by them. We can also consciously choose to increase the number of positive thoughts and feelings in our daily lives. With practice, we can rewire our brains so that our default state becomes one of gratitude rather than resentment.



RECENT CLINICAL TRIALS

- > In a clinical study of 150 patients with multiple sclerosis, mindfulness-based stress reduction (MBSR) reduced depression, anxiety and fatigue.
- > In a clinical study of 64 patients with rheumatoid arthritis, MBSR didn't affect disease activity, but it did significantly reduce the psychological distress which often comes with the disease.
- > In a clinical study of 58 patients with fibromyalgia, MBSR reduced pain, anxiety and depression, and those improvements remained three years later.
- > In a clinical study of 48 patients with IBS or IBD, mindfulness training reduced pain and anxiety, and even altered gene expression.
- > Finally, a fascinating study in the journal *Brain, Behavior, and Immunity* measured responses to stress before and after MBSR training. Before mindfulness training, stress caused an increase in both stress hormones and inflammation. After training, there was significantly less inflammation, despite the same level of stress hormones. This indicates that while we can't always control the stress in our lives, we can control its inflammatory effect on our bodies.

This is just a small sampling.
Search "**psychoneuroimmunology**" on
Pubmed.com for more!



10 Ways to Harness

THE ANTI-INFLAMMATORY POWER OF YOUR BRAIN

Breathing. There's a big difference between the shallow, unconscious breaths we take every day and a slow, deep, mindful breath. Just a few of the latter can make you feel differently. Why? Deep breathing increases the oxygen supply to your brain and taps into the relaxation response.

Silent Meditation. Continue to breathe for five minutes, focusing your attention on your breath. Say silently to yourself as you breathe, "Inhale. Exhale." If thoughts come, just notice them and let them pass without following them. Everyone—even monks—has thoughts running through their head. This doesn't mean you are a meditation failure. With practice, it gets easier to let these thoughts go. It can help to label thoughts and emotions as they arise: past, future, worrying, planning, fear, sadness, etc. The labels will eventually lose their power somehow, which makes it easier to let them go. If you enjoy five minutes, slowly increase your time.

Guided Visualization. If silent meditation isn't for you, try guided visualizations. They're great for beginners, because they fill your mind with images that displace your thoughts, and the images are soothing and beautiful.

Affirmations. So often, the voice in our head is cruel. We say things to ourselves we would never say to anyone else. Affirmations are a way to change this pattern. It may feel awkward at first if you aren't used to speaking kindly to yourself, but over time this can become your new default. Instead of saying, "You're so stupid! You can't do anything right. You brought this upon yourself," try, "You are doing the best you can. You deserve health and happiness, and I love you."

Immerse Yourself in Nature. There are studies showing that simply looking at nature helps people in hospitals heal faster. There's something about it that both soothes and inspires. In fact, there's a whole book written about this called *Healing Spaces* by Esther Sternberg. So, go outside someplace beautiful. Leave your iPod and smartphone at home.

Loving Kindness Meditation. This is a practice of sending love and well wishes to yourself, to someone you love, to someone you barely know, and finally to someone whom you find challenging. Love is an anti-inflammatory emotion, and this is a way to generate this feeling toward ourselves and others. Repeat these mantras to yourself: "May I be happy. May I be well. May I be safe. May I be peaceful and at ease." After saying them to yourself, adapt these sayings to each person.

Body Scanning. This is a meditation practice where you lie down and tune in to your body nonjudgmentally. Often, we are

so frightened by our autoimmune symptoms that we disconnect from our bodies and try not to feel our bodies at all. In doing so, we cut off a part of ourselves. Body scan meditation is simply a slow reconnection, where we focus our attention on one part of our body at a time, from the tips of our toes all the way up to our head and fingertips. The experience can be relaxing, and sometimes it can lead to emotional release, both of which can aid the healing process.

Moving Meditation. Some people are just born to move. Sitting still triggers anxiety rather than releases it. If this is you, don't despair. There are many ways to tap the stress-reducing, anti-inflammatory benefits of meditation through motion with yoga, tai chi, healing dance or walking meditation. Tune in to your body and immerse yourself in the experience. When you find yourself thinking, just notice the thoughts, let them go, and return to your body in this moment.

Gratitude. Too often, we take the blessings in our lives for granted, noticing only what's wrong instead of what's right. It's not our fault—our brains are actually wired for this. It's called the negativity bias. A daily practice of gratitude can help us overcome this pattern. It's not about denying the challenges in our lives; it's simply learning to see the positives alongside those challenges. Start a gratitude journal, and write down one to three things each day for which you are thankful. They can be small—a delicious meal, a beautiful flower in your garden, a phone call from a friend, a song that you love. But it's these small moments that make up the fabric of our lives.

Mindful Moments. Mindfulness is simply the art of paying attention, and you can practice anywhere, anytime. If you're sitting at a traffic light, take a deep breath and notice the color of the sky, the formation of the clouds, or the way the rain or snow falls onto your windshield. If you feel yourself becoming upset, stop and notice the feeling without letting it consume you. If your inner voice becomes critical, stop and say something kind to yourself instead. You can eat mindfully, walk mindfully, work mindfully, listen mindfully—there's no limit to the moments where we can be fully present. And presence is a healing state.

TIP

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Mark Sisson

14 Alternatives to

SITTING MEDITATION

Meditation's popularity has exploded in recent years, especially in the West, where new layperson adherents are taking the plunge into this time-tested Eastern practice. As legitimate meditation researchers uncover more benefits for our brains, our bodies and our psyches, diehard rationalists have been forced to accept the scientific merits of mindfulness. The fact is, meditation has been shown to provide remarkable benefits to those who manage to stick with it, including, but not limited to:

- **Lengthening of telomeres**
- **Upregulating genes responsible for energy metabolism, longevity, mitochondrial function, inflammation and insulin secretion**
- **Normalizing blood pressure**
- **Reducing stress**
- **Increasing resistance to stress**
- **Improving cognitive function by reshaping the actual brain**
- **Promoting neuroplasticity**
- **Reducing anxiety**
- **Improving the immune system**

My explanation for why interest in meditation has grown is that it's a replacement for the nature in which we no longer reside. For hundreds of thousands of years, we spent our days in natural settings where much of the mind-chatter stops and we exist in the present moment. The falling leaves sparkling overhead with sunlight. The herky-jerk scamper of a startled lizard just off the trail. The erratic, brilliant butterfly fluttering through the scene that you can't help but stop to watch. That was life for most of human history. It wasn't special. It was home. It's what we knew.

Meditation represents a return to that ancestral state of presence in the moment. Unfortunately, I get the sense that more people are talking about meditation than actually doing it on a regular basis. Admittedly, I'm one of them, quick to recommend meditation because of the irrefutable benefits, but unable to actually sit for a productive session, let alone a regular meditation routine.

If we simply don't enjoy meditation or can't make it work, what options do we have? How can we get some of those attractive effects of meditation without actually sitting in a room for 30 minutes a day, every day? Here are 14 alternatives to get you going.

1. NON-JUDGMENTAL AWARENESS

From the moment most of us wake up, we're making split-second judgments about everything and everyone we encounter. That guy across the street who didn't pick up after his dog? What a jerk. All those cars lined up along the onramp? Great. Now I'm going to be late. Even our thoughts and feelings demand a response from our brain, so we end up stressing out about stress and lamenting the sadness we feel and thinking about thinking about thinking. Instead of all that, try this: When a thought arrives, or a situation occurs, or anything at all happens, hold back judgment. Even if it's positive.

These judgments are often subconscious, so the first step is to realize we're making them. Observe and acknowledge the item. If it's sadness, accept it. If it's a rude driver cutting you off, move on. If a bird poops on your shoulder, get a paper towel.

As I see it, this is the ultimate goal of any formal mindfulness meditation practice: to do it in daily life.



2. SURFING

Have you ever seen a depressed, anxious surfer? Me neither. In 2011, researchers found that surfers are far less likely to suffer from depression or anxiety than the general population. Scientists have even rigged up top surfers with EEGs to quantify the physiological state of "stoke." Although the results haven't been released yet, I'd imagine stoke looks an awful lot like mindfulness.

Like mindfulness meditation, surfing has been used to improve quality of life in veterans with PTSD.^{1,2}

3. STANDUP PADDLING

This is my favorite and most dependable way to meditate. It's not a workout (unless I intend it to be a workout, or I'm racing someone). The benefits to fitness and body composition are afterthoughts, albeit welcome ones. When I paddle, I'm immersed in what psychologists call the "oceanic feeling"—that sense of one's self dissolving into the greater external world. That's why I paddle.

4. SWIMMING

Many find meditative solace in swimming laps slowly, deliberately. Swimming is great exercise, sure, but those with crisp, clean technique and enough endurance can turn it into a legitimate meditation practice. As a child, Michael Phelps swam as an antidote to his ADHD because it quieted his mind. Though he didn't call it meditation, it effectively was.

My favorite way to reach a meditative state in the pool is through underwater swimming. You dunk your head and enter another world where sound sounds different, gravity affects you differently and you're free to explore full-dimensionality. Nerves along every inch of your body come alive with water contact; the present moment becomes a sensory feast. You also

can't breathe, which means my underwater meditations are short bites.

5. TAI CHI

Practitioners often call it "movement meditation," and that's exactly what it is; research has confirmed many similarities between meditation and tai chi.³ In one study, elderly Chinese adults living in group homes were placed in tai chi, walking, social-interaction or no-intervention groups. The tai chi group saw increases in brain volume, verbal learning and verbal fluency, as well as improvements in dementia scores.⁴ Tai chi also lowers cardiovascular risk in women, just like meditation.⁵

6. YOGA

Many yoga practitioners will say that yoga isn't really about the poses or the stretching. It's about the meditation. And when you think about what happens in your typical yoga pose, it's the perfect opportunity to practice acceptance of discomfort. Those who practice mindfulness are also practicing nonjudgmental awareness of both positive and negative emotions, thoughts and situations. You can observe that you're feeling sad, or happy, but it's only by identifying with

those emotional states that we grant them power over us ("I am sad and that is a bad thing"). Yoga poses are often painful and uncomfortable. If we can observe the physical discomfort of a particular pose from a detached position, neither running from it nor dissolving into it, we are practicing true mindfulness.

Like meditation, yoga may have beneficial effects on telomere length (and longevity).⁶

7. MUSIC PRACTICE

Researchers have begun to reconceptualize musical practice as a form of mindfulness meditation.⁷ I wouldn't recommend a total beginner grabbing a violin and expecting to reach a state of mindful bliss; you'll just fiddle around and produce a cacophony so jarring that not even the Buddha himself could avoid passing judgment. Instead, try an instrument you can actually use. Grab a hand drum and keep a simple beat. Strike the side of a Tibetan singing bowl, and observe the resonance. Something simple (or not so simple if you're experienced).

8. VITAMOVES

VitaMoves is a movement practice predicated on moving





one's tissues and joints through their full ranges of motion in a deliberate manner. Rather than momentum, you move with presence and intent. Rather than speed through it while thinking about the bills you have to pay, you focus on your body as it moves through space. You feel and focus on the stretch in your lats, the pull of your left hamstring when you move one way, the contraction of the quads when you rise from a full squat.

9. WALKING

Tara Brach, a Buddhist teacher who publishes guided meditations and lectures on her fantastic podcast, is a proponent of walking meditation. Rather than sitting in stillness, she suggests walking along a short, predetermined path of 20 to 30 paces somewhere quiet and familiar. This creates boundaries and reduces distractions. More seasoned or confident people can go on unstructured, longer walks. The important thing is to pay attention to the shifting weight of your body as you walk, the feel of your footfalls and the sensation of gliding through the air. As with sitting meditation, allow thoughts and other distractions to come and go; acknowledge but do not dwell on or judge, them.

Compared to a regular walking routine, a walking Buddhist meditation practice reduced depression, improved

fitness and vascular function, and lowered stress hormones in depressed elderly patients.⁸ This may be even better in some respects than sitting meditation, which can also lower stress hormones and combat depression but generally doesn't improve physical fitness.

10. BREATHING

Many meditative practices use the breath as the focal point, the rock to which you come back when the mind slips away from immediate presence: "Return to the breath." If the word "meditation" trips you up or intimidates you, just breathe. Inhale and exhale, ideally through your nose. Observe how your diaphragm contracts and expands with each breath. Feel the weight of your body settle into gravity's pull as you exhale. Oftentimes, people intent on following a breathing pattern will find themselves in the meditative space without really trying.

Like meditation, deep breathing exercises can reduce sympathetic activity, induce relaxation and counter anxiety.⁹

11. HIKING

Combine being in immersive natural settings with the walking meditation mentioned above and you get hiking, my favorite land-based form of meditation. Maybe it's my type A personality I just can't turn off, but being motionless is oddly stifling. I have to move to

get a handle on my mind, to quiet the chatter. If I move through natural settings, the chatter stops even quicker.

12. COLORING

First popularized by Jung, who had his patients draw and color intricate mandala patterns, adult coloring books are enjoying an explosion in popularity. Coloring within the lines requires presence. Your mind wanders, you spill over the line. Most importantly, coloring is an immersive, intrinsically rewarding practice. To see the patterns pop alive in full color is its own reward.


13. DANCING

Dance like nobody's watching, they say. That's exactly what meditative dancing looks like. The body and the music merge. The self, the all-powerful "I," disappears, if only for a few minutes. But that's enough. Best part of all? You don't really even have to be "good" at dancing to get the benefits. Second-best part of all? Dancing like nobody's watching always looks better than dancing like everybody's watching.

14. GUIDED MEDITATIONS

Some purists might scoff at a person's reliance on guided meditations to achieve mindfulness, but forget them. Shortcuts that get you to the place you're headed are awesome. Guided journeys are still journeys. And hey, once you've been taken safely along the route a few times, you can probably find your own way to the destination.

From truly impressive physiological effects like the beneficial alterations to brain function and morphology, the extension of telomere length, the activation of genes critical to health and longevity, and more intuitive benefits to general well-being, stress and anxiety levels, the established benefits of meditation on dozens of physiological and psychological systems far outpace those of the alternatives presented here. But self-motivation to practice meditation can be tough. For some people, saying "Just meditate every day" is advice akin to "Just eat less"; it "works," but not really. These alternatives may not fully replicate the effects of mindfulness meditation, but they'll get you far—and they're certainly better than doing nothing.

Either way, you're losing the self. The self as a psychological construct, a surveyor sitting behind your eyes observing and guiding your actions, is gone. What remains is only the direct experience of the present moment: the hand against the drum, the swelling of a budding wave off toward the horizon, the paddle slipping smoothly into the water, the breath entering and leaving your body. And that's what truly matters most. 

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MENTAL HEALTH

THE SIXTH PILLAR OF PALEO



Of the Seven Pillars of Paleo, this Pillar, that of mental health, is the one over which you have the most control. Unlike all the other Pillars, the health of the mind is solely up to you. It's not that nobody else wants to help you with your mind—it's that ultimately, they can't.

Since we became *sapiens*, we have each discovered that within our skull lies our own world. You decide who and what enters, and when they leave. It is a wonderful and terrifying thing, and each of us bears the responsibility to develop this most powerful of tools. The most that the outside world can give you are hints or directions to the mind's usage. Even then, the fuzziness of language can so obscure directions that the intention of one may not match the understanding of another.

With this as the preface, and facing the enormous life's project that is the cultivation of a healthy mind, the essential elements to include are twofold. They are both simple and complex—the work of a moment to hear, and the quest of a lifetime to fully implement. First, understand your purpose. Second, seek out your joy. Within those two elements, the *why* and the *joy*, lie both the peaks and the depths of the human experience.

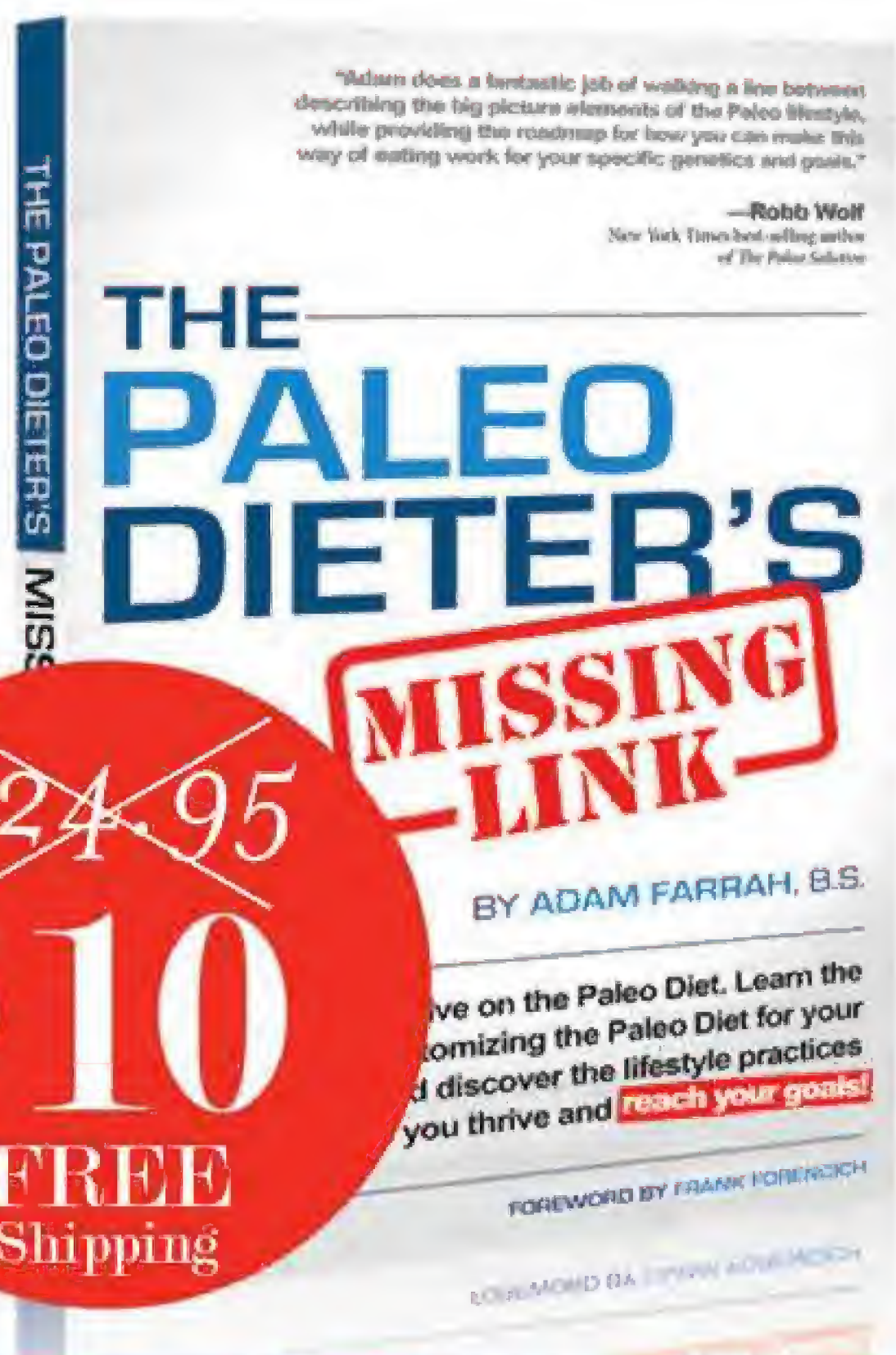
The mind often becomes a hidden Pillar of Paleo. We focus on the other six Pillars because they are easy, and external, and countable. Nutrition, exercise, sleep, sunlight, water, even community, can all be assigned a number and displayed to the world as a success or fail operation. The mind, however, is our own. No one but you knows what happens inside your mind, there is no number that can quantify our mental health, and even the most truthful of people may not always wish to broadcast their inner state.

This mandatory privacy allows many of us to put ourselves on autopilot. Because the basics of life are relatively easy for most of us who proclaim to be "Paleo," we fall prey to the siren call of our ancient prerogatives. We find "close enough" answers to the *why* and the *joy*, and move through life using mostly our lizard brain: Find pleasure. Sleep when tired. Eat when hungry. Reproduce. Develop a comfortable pattern. Slowly burn away the most precious opportunity we have proof of: our life. This pattern focuses attention on the six "countable" Pillars while allowing us to keep the seventh and most important in shadow, even to ourselves!

The solution to this is simple and profound. Constantly question your why, and make time daily for joy. What drives you? Why have you chosen your career? Why did you make the choices that brought you to where you are today? Have you had fun today? Have you had any moments of joy? How could you add more joy to your life?

The beautiful takeaway for this Pillar is this: If you're willing to work, if you're willing to put in the time daily to question your own *why* and to follow your own *joy*, if you're willing to both ask yourself and clearly listen, you have the opportunity to fully express your potential at the leading edge of evolution. There is no financial cost, there is no physical burden, there is not one thing that can stop you except you.

The concepts of evolution have worked unknowingly to bring you to this point. You are the greatest hope for the next generation, and only you have the ability to realize that hope. It is your turn in the barrel. Find your *why*. Follow your *joy*. 🐾



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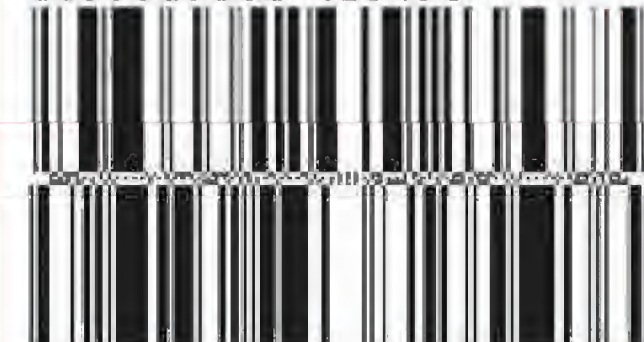
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Amy Kubal, MS, RD, LN

What's the deal with chia and flax seeds? Do they cause inflammation? Are they good sources of omega-3s?

If you're tuned in to the latest and greatest nutrition news, then you're no stranger to flax and chia seeds. The headlines tell you that they're a great source of omega-3 fatty acids and that they provide a wealth of other nutrients—but, well, those messages are *seedy* at best. Before you whip up that batch of chia seed pudding, here are the facts.

THE OMEGA-3 FALLACY. Do flax and chia seeds have omega-3s? Yep, they sure do, *but* the omega-3s they contain aren't in a form that the body can use right out of the gate. Seeds and other plant-based omega-3s are great sources of alpha linolenic acid (ALA). But ALA must be converted to docosahexaenoic acid (DHA) and eicosapentaenoic

acid (EPA), the omega-3 fatty acids most beneficial to health, and the rate of conversion is about as high as the temperature in North Dakota in mid-January. Additionally, as is the case with all nuts and seeds, chia and flax also come with a whole bunch of omega-6 fatty acids. Omega-6 fatty acids are "pro-inflammatory," which just stacks the cards against the "high-omega-3" argument even higher.

NUTRIENT POWERHOUSES? Um, not by any stretch of the imagination. Sure, if you look at the nutritional information on the seeds, they might seem pretty impressive—but these little guys are also full of phytic acid. Phytic acid (an antinutrient), binds with the seeds' minerals (copper, iron, zinc, magnesium and calcium), preventing their absorption and use in the body. Your poop, on the other hand, is packed with nutrition... (It's a crappy deal all the way around.)

WITH THE
PALEO DIETITIAN

*If you have a
question for Amy,
the Paleo RD, email
it to her at therd@paleomagaonline.com*

GOT INFLAMMATION? As I mentioned above, flax and chia are loaded with omega-6 polyunsaturated—and in many cases “pro-inflammatory”—fatty acids. If that’s not enough to deter you, regular intake of these little buggers may result in intestinal inflammation, leading to leaky gut. Also, with their high fiber content, they have the potential to lead to “leaky (something that rhymes with gut)”...

So, all that said, is eating something with chia or flax in it once in a while going to do any major damage? Most likely not. But flax and chia seeds are likely *not* going to help you “grow” healthier.

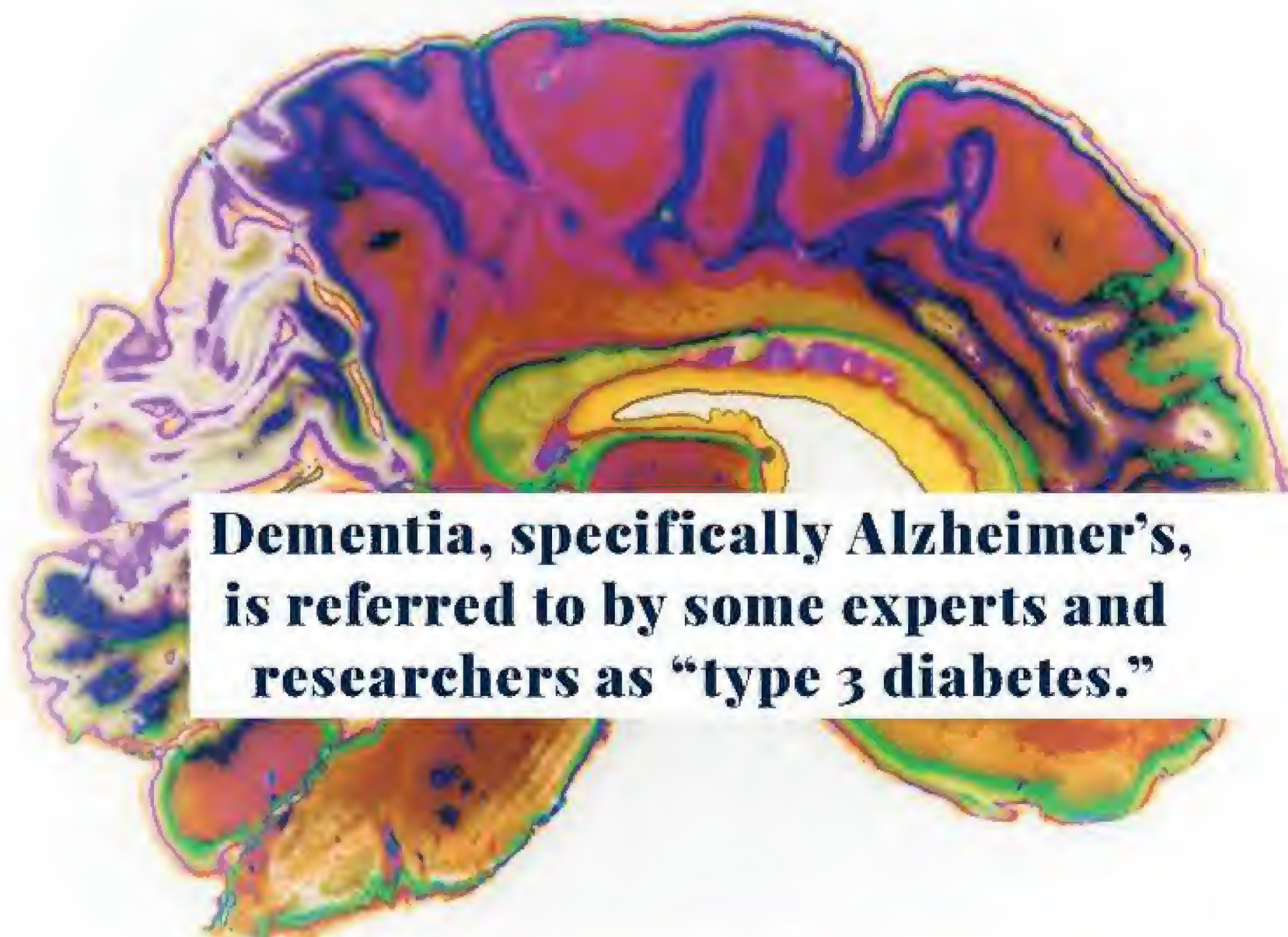
I was recently diagnosed with small intestinal bacterial overgrowth (SIBO) and am currently undergoing herbal treatment. Would a Paleo diet be beneficial to my healing?

Gut bugs are serious business, especially when they’re all out of whack. We all have, and need, the little guys to keep our guts and ourselves healthy, but there’s a fine balance—too many or too few = no bueno. SIBO is what happens when our gut bacteria, or a certain strain of gut bacteria, “go crazy” (i.e., start reproducing like rabbits). While switching to a Paleo style of eating alone often isn’t enough to remedy the problem, diet does play a major role in how our gut flora gardens grow. That said, a Paleo diet can help get—and help keep—your gut healthy! A nutrient-rich Paleo plan is a great starting point, but you may need to modify your food choices a bit more to see and feel results.

Our gut bugs are much like us—they like to eat carbs! Also like us, if you don’t feed them, they will die off. When treating SIBO with diet, limiting carbohydrates and sugars, even those from

fruits, starchy vegetables and “natural” sources, can be very beneficial. In addition, avoiding high-FODMAP foods (onions, cabbage, garlic, broccoli, coconut and an extensive list of other things) and cooking your vegetables is recommended. It may also be a good idea to avoid fermented foods, along with pre- and probiotic supplements, as these feed gut bacteria and may exacerbate the overgrowth.

I would highly recommend connecting with a physician or alternative health professional who is well versed in gut conditions and SIBO, in the event that diet changes alone do not alleviate your symptoms. Know that healing will not be instant, and that it will likely take time to figure out what is and isn’t going to work for you and your body. Hang in there, don’t give up and know that you will eventually get to the bottom of what’s “bugging” you!



Dementia, specifically Alzheimer’s, is referred to by some experts and researchers as “type 3 diabetes.”

My father was recently diagnosed with dementia. His mother also suffered from the same condition. Needless to say, I’ve been thinking a lot about things that I can do to avoid the same fate as I age. Are there any nutrition strategies I can use to protect myself?

I’m sorry to hear about your father, but it’s great that you are taking a proactive approach to keeping your mind and body healthy for the long haul. Nutrition and lifestyle are huge factors in keeping you at the top of your game as you age. Dementia, specifically Alzheimer’s, is referred to by some experts and researchers as “type 3 diabetes.” Type 2 diabetes causes brain insulin resistance, oxidative stress and cognitive impairment that, when left untreated or unmanaged, can lead to permanent cognitive damage and dementia—i.e., the “type 3” kind.

The best strategy to avoid experiencing the same fate as your father and grandmother is to go on a damage-control mission. Diet is a great place to start. Following a real-food, Paleo-type diet that is low/moderate in carbohydrates (even the good ones like sweet potatoes, potatoes, root vegetables and fruits) and abundant in non-starchy vegetables, lean proteins and good fats is a great way to keep both your mind and body healthy. The key lies in keeping your blood sugar levels stable in a healthy range—not letting them get too high or too low. Recent research also suggests that increasing intake of fatty fish (salmon, tuna, etc.) and omega-3 fatty acids may also help prevent Alzheimer’s and other dementia-related conditions.

It’s also important to understand that diet alone can’t do it all! It’s super important to optimize your overall lifestyle. This means incorporating smart exercise, sleeping enough and managing stress. All of these factors play huge roles in your brain health and cognitive function. The steps you take to improve your diet and lifestyle now will, no doubt, have positive effects in keeping your mind and body healthy for the long haul!



creating

A GARDEN THAT PRODUCES 75% OF YOUR DIET

BY SIMPLY LIVING A PALEO LIFESTYLE, YOU'VE ALREADY UPGRADED YOUR LIFE. You know that you feel best with the highest-quality foods, rest and exercise. The rest and exercise are generally affordable, but what about the high-quality food? Like most of you, I know how difficult food costs can be. If we look at the typical Paleo plate (from the book *It Starts with Food*), about 25 percent is protein (meats, eggs or nuts), a small portion is good fats, and the rest of the plate—about 75 percent—is fruits and vegetables.¹ After years of experimentation on my family's organic farm, I've finally found the garden system that grows 75 percent of my family's diet for just pennies a day.

This high-performance garden system has saved my family thousands per year on our grocery bill. In only 128 square feet (the same area as three king-size beds), we spent 15 minutes per day and grew 743 pounds of food that had a street value of \$2,560. Could you find 15 minutes per day to invest in a garden that gave you \$2,560 in value? With that much saved, you could buy a whole cow! That would be about 500-plus pounds of organic, grass-fed beef! Fifteen minutes a day was doable for my busy schedule—and it also became part of my meditation time. Studies have shown that when you spend time in the garden with nature, your brain releases serotonin. Serotonin has been



Lynn Gillespie

found to boost your immune system and your happiness.²

When we grow in a high-performance garden, we are not only enjoying the cheapest food possible—we're growing the most nutrient-dense produce possible, as long as we pay attention to these three factors:

THE SOIL

Your plants need a good organic base full of microbes that is also well mineralized.

VINE RIPENING

Fruits and vegetables receive most of their vitamins just as they are ripening, so they will contain more nutrients than foods that ripen off the vine.

EATING FRESH

Once a fruit or vegetable is harvested, it will start to consume its own nutrients to stay viable. The sooner you eat or freeze it, the more nutrients you will preserve.

Growing your food at home gives you control over the environment, allows you to vine ripen your food, and lets you decide how quickly you can consume the fruits and vegetables. For our dinner, I go out to the garden with a basket and pick whatever my family will eat, and it's on the table within 30 minutes. That's as nutrient dense as it can get!

Now that you understand the most important part of your garden, it's time to choose a gardening style. There are four different garden styles that most people grow in:

- > Row garden with chemicals
- > Container garden with chemicals
- > Organic row garden
- > Organic container garden

Your first decision is between chemical and organic. The chemical companies want you to believe that there is only one way to successfully grow a garden—with their products. Chemical gardening has been around for about 150 years, which is only 1.5 percent of the total time humans have been gardening. We've been growing things successfully for around 10,000 years without chemicals, and so can you. In an organic garden, the nutrient density of the food is higher because the "soil food web" can easily deliver the minerals the plants need. Once you introduce chemical pesticides, herbicides and fungicides, the microbes in the soil die off and the plants don't get as much nutrition.



Photos by The Living Farm

So, we know that we cannot use a chemically supported garden to grow our food. This leaves us with the choice between an organic row garden and an organic container garden. Row gardens are rototilled and traditionally very large. I started in a row garden, but found it to be way too hard and weedy, and the production was too low. When it comes down to it, most of us just don't have good enough soil—typically clay or sandy soil with no organic matter—for growing plants in our backyards. Unfortunately, plants like to grow in sandy loam with a lot of organic matter. To alter the soil in your yard to meet plants' high standards takes a lot of time and adjustments.

Fortunately, though, there is another gardening method that skips this stage, and starts with the perfect soil: container gardens. Container gardens are any gardens that have borders and custom-made soil. These containers take many forms and shapes, such as towers, pots and even kids' swimming pools! My favorite container garden is a cinder block garden. I stack my cinder blocks two high, which gives me 16 inches of amazing soil for my plants to grow in. The great thing about a container garden is that you can grow one anywhere—in the yard, on the driveway, in the window and on the roof.

So, now that we know the best option regardless of space limitations is an organic container garden, how do we go about using one to grow 75 percent of our diet? According to Dr. Terry Wahls, there are certain combinations of fruits and vegetables that provide optimum nutrition. Each day, we should eat three cups of leafy greens, three cups of colored fruits and vegetables and three cups of sulfur-rich vegetables.³

You should plant your gardens based on those guidelines. One third of your garden should be leafy greens like leaf lettuces, spinach, kale, Swiss chard and bok choy. The next third should be colored fruits and vegetables that are colored

all the way through. Some of the easiest, most productive and colorful vegetables to grow in your garden are beets, carrots, tomatoes, red cabbage, red peppers, winter squash and zucchini. The remaining space should be sulfur-rich vegetables, which include the onion family, mushrooms, asparagus, broccoli, kale, cabbage, leeks, radishes and turnips.

Now let's take a look at the spaces available to us, and get creative. Here are some simple ideas for people in the city with no space for a garden or those who have very limited backyards—as well as ideas for what to do when you have lots of space to work with!

City Gardening

If you don't have a yard, look around at the space available to you. Do you have a patio, rooftop or window sills? Odds are that you can at least grow your leafy greens there. They will take up the smallest amount of space and give the highest yield for the space you do have. You can grow in a tower, pots or tubs. The most important part is that you start. You can also ask your friends if any of them will share their yard with you, which is a great way to enjoy a garden together. Otherwise, join a community plot or grow a garden at your church, school or work. Think outside the box if you're looking for garden space. One of my students built her cinder block garden on top of her driveway! It was such a success that she had to give food away to keep up.

Suburban Gardening

Go to your yard, patio or driveway. All you need is 128 square feet of space to get started. With this garden size, you can grow enough food for two to three people all season long. Remember, you don't have to grow all of your food in one spot. ➤



did you know?

🍷 The first recorded squash cultivation was 10,000 years ago in Mexico.

🌱 MOST VEGETABLE GARDENS ARE GROWN OUT OF NECESSITY. IN 1981, INTEREST RATES WERE AT 20%, AND 37 MILLION AMERICANS GREW VEGETABLE GARDENS.

💧 The average traditional row gardener can yield an estimated 1/2 pound of fresh produce per square foot of garden area.

🔪 THE LIVING FARM, IMPLEMENTING A HIGH-PERFORMANCE GARDEN BED, PRODUCES AN AVERAGE OF 5.8 POUNDS OF FRESH PRODUCE PER SQUARE FOOT OF GARDEN AREA.

🏠 In 2008, 33 million households had food gardens at home (91%); 2 million households had gardens at a friend's, neighbor's or relative's home (5%); and 1 million households gardened in a community garden plot (3%).

🔥 58% OF VEGETABLE GARDENERS IN 2008 GREW A GARDEN BECAUSE THEY WANTED BETTER-TASTING PRODUCE.

You can grow the leafy greens in a place that gets less sunlight—say, four to eight hours. Put the colored vegetables in a spot with the most sunlight (six hours or more), and the sulfur-rich vegetables will want at least four hours of sunlight. Look around—I'm sure you have the space to put in small gardens here and there!

Countryside Gardening

If you have a large yard or acres to plant, there is still no need to go big. The biggest thing to keep in mind here is to keep things small and



manageable your first year; I'd recommend sticking to 128 square feet for the first season. This makes it much easier to learn, and you can always expand the following year.

Use this Garden Scout Checklist to help determine what type of garden you can create in the space you have. This will help you to quickly be on your way to a successful, nutrient-dense gardening season!

THE GARDEN SCOUT CHECKLIST

- > Monitor how much light your potential garden beds have, and designate whether they will be for leafy greens (four to eight hours), sulfur-rich vegetables (at least five hours) or colored vegetables (six-plus hours).
- > Find an area that doesn't have too much wind.
- > Research the type of containers you want for your garden. They might be pots, pools or a raised bed.
- > To get started on your high-performance garden, you can join the free online High Performance Garden Community at TheLivingFarm.org.

Make the decision today to control the nutrient density of your food, your finances and your sanity. Hopefully, the information in this article has helped you identify the high-performing gardening system that will give you the most success. And remember, you can start by growing a small part of your diet, and every year increase the amount you grow until you reach the 75 percent mark.

Now, go scout out a location and begin building your garden! 🌱

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Kimchi is a spicy pickle that is a staple in Korea. It's actually the official national food, and I am told that it's served with every meal. Almost every restaurant in Korea, even many that serve "Western" food, offers kimchi as a free side dish, complete with unlimited refills. I find this a more appealing option than the free bread usually offered by restaurants in the United States.

Cuckoo for Kimchi



Lisa Herndon, MS, CFNP

You can think of kimchi as a relative to sauerkraut. Sauerkraut is shredded cabbage that is brined and fermented just like its Korean counterpart, and because of the fermentation process and live cultures, it shares a similar sourness and pungency. Kimchi, however, is typically prepared a bit differently. Although kimchi is made in diverse styles and with varied ingredients, there are some common patterns. Kimchi recipes typically call for pre-soaking vegetables in a 5 percent salt brine by weight for eight to 12 hours. The vegetables are then drained, sometimes rinsed, and mixed with a paste of garlic, hot pepper, onion and ginger.

Types of kimchi vary by region and season, but it's generally dominated by one particular vegetable such as Napa cabbage, daikon radish or another sturdy vegetable. Kimchi has more than 180 varieties, including baechu kimchi (cabbage kimchi, the most commonly served kimchi), bossam kimchi (rolled kimchi), baek kimchi (white cabbage kimchi), chonggak kimchi (whole radish kimchi), kkakdugi (chopped radish kimchi), dongchimi (winter white water kimchi), oi sobagi (stuffed cucumber kimchi), pa kimchi (scallion kimchi) and gat kimchi (leaf mustard kimchi).

Have you ever bought a bottle of fermented kimchi and had it spurt out of the bottle as you opened it? If this hasn't happened to you, consider this fair warning and open a new bottle in the sink to minimize the mess. (You're welcome.) It turns out that the fizziness associated with some kimchis is a result of some serious carbon dioxide production that typically occurs in the early stages of fermentation. I especially enjoy the effervescence of a nice bubbly kimchi. Just be careful opening that jar, as kimchi can stain.

Did You Know?

> Kimchi is often not vegan or vegetarian.

Early versions of kimchi were actually made with beef bone broth. Today, most traditional variations of kimchi are made with fermented anchovy or shrimp pastes—the glutamic acid found in fish gives kimchi its savory flavor. Vegan or vegetarian forms of kimchi are recent additions that were introduced to suit modern consumer preferences.

> **South Koreans eat about 40 pounds of kimchi per person annually.** Meanwhile, the average American consumes anywhere between 150 and 170 pounds of refined sugars in one year. Perhaps we should consider replacing some of our refined sugar intake with kimchi to improve our health!

> **When Korea sent its first astronaut (Yi So-yeon) to the international space station in 2008, she brought a specially formulated kimchi.**

The Korean government spent millions developing a kimchi that would not become dangerous due to the conditions in space and wouldn't make the non-Korean astronauts uneasy with its odor.

> **Kimchi is rich in vitamin A, thiamine (B1), riboflavin (B2), calcium and iron.** Kimchi also contains probiotic lactic acid bacteria, and even has a strain called *Lactobacillus kimchii*.

> **Koreans love their kimchi so much that they invented a refrigerator for storing it.** The kimchi refrigerator became commercially available in 1985, and it's purported that roughly 80 percent of Korean households possess one. These fridges can store over 100 heads of cabbages of

kimchi. (Some variations of kimchi recipes ferment the intact head of cabbage rather than slicing it into pieces.) These refrigerators tend to run colder (32°F to 41°F), with more consistent temperature, more humidity and less moving air than a conventional refrigerator, providing the ideal kimchi fermentation environment. This sure beats the traditional method of burying a kimchi-filled crock in the ground.

> **There is an entire museum in Seoul, South Korea, dedicated to kimchi.** The Kimchi Field Museum is dedicated exclusively to kimchi's history, its varieties, and its importance to Korean culture and cuisine. The museum collects data on kimchi-related resources and statistics and also offers related activities, such as kimchi making and kimchi tasting. You can even observe the *Lactobacillus* bacteria in kimchi through a microscope.

> **In 2010, there was a kimchi crisis.** Bad weather halved the amount of Napa cabbage normally produced and caused the price to rise almost sixfold (from about \$2.50 to \$14). The Korean government had to step in and subsidize the cabbage for its citizens.

> **My Korean neighbor told me that as a child, her father received an annual "kimchi bonus" from work so that his family could make their base kimchi supply.** It was common for the women in the family (aunts, mothers, sisters, daughters and grandmothers) to gather and spend a late fall day preparing the cabbage-based kimchi to ferment during the winter. A properly stored batch would easily last the year without spoiling. I've found that it can actually last up to two years if stored properly (maybe even longer).

Kimchi is a key ingredient in several favorite Korean dishes. It's the star ingredient in dishes such as kimchi fried rice, kimchi pancakes, kimchi soup and stew. If you haven't tried kimchi stir-fried "cauliflower" rice, you should. It's superb.

Kimchi Stir-Fried Cauliflower Rice

- 3 cups cooked cauliflower rice*
- 3/4 cup chopped kimchi (*drain and reserve the kimchi juice in a separate bowl*)
- 1/4 cup kimchi juice
- 1 tsp minced fresh garlic
- 2 tsp coconut oil
- 1 green onion, chopped
- 1–2 tsp cold-pressed sesame oil (to taste)

1. Heat a pan on medium-high. Add the coconut oil.
2. Add the scallion, garlic and red pepper flakes and stir-fry for about a minute.
3. Add the kimchi and continue to stir-fry for another 1–2 minutes.
4. Add the riced cauliflower and kimchi juice. Stir all of the ingredients together for about 5 minutes with a wooden spoon.
5. Remove from the heat and drizzle with the sesame oil.
6. Garnish with some more chopped green onions and a pinch of fresh kimchi.

**While you can certainly rice your own cauliflower, I use the frozen organic riced cauliflower from Trader Joe's. If you want to make your own, simply take a whole head of cauliflower, break it into florets, and pulse gently in a food processor until you get "rice-size" pieces. Go slowly so you don't end up with mashed cauliflower!*

{ IN-SEASON } Farmers Market List

THIS IS THE TIME OF YEAR WHEN ALL THE TENDER GREEN THINGS EXPLODE INTO LIFE AFTER THE LAST OF WINTER'S CHILL IS FINALLY PUT TO REST. A potent combination of rain and sunshine will be just the thing to nourish most gardens, helping you to enjoy the first delicate tendrils of the pea shoots and bucketfuls of fresh lettuce and herbs. If you're lucky, your spring might also include the first sweet fruits of the season.

During these months, keep an eye out for:

- ☐ Artichokes
- ☐ Lettuces and fresh greens like arugula, watercress, dandelion greens, mizuna, chard, sorrel and spinach
- ☐ Fresh herbs like mint, chervil and chive blossom
- ☐ Green garlic, onions, spring onions, and onion and garlic scapes
- ☐ More radishes and rhubarb
- ☐ New potatoes, fava beans, pea shoots and snap peas
- ☐ Fiddlehead ferns
- ☐ Berries, like strawberries and blueberries

REFERENCES

"Seasonality table." BBC Good Food, <http://www.bbcgoodfood.com/seasonal-calendar/all>
 "The July Seasonal Food Guide." The Year In Food 08 July 2011. <http://theyearinfood.com/2011/07/the-july-seasonal-food-guide.html>
 "Monthly Produce Calendar." Indawe: The Network News. http://www.indawe.com/food/produce_calendar.html#june

PALEO MAGAZINE PALEO 101

modern day primal living

THE PALEO LIFESTYLE
IS ABOUT **NOURISHING**
our bodies with **REAL FOOD**
that is grown & raised
as nature intended,
NOT manufactured in
a sterile facility.

PALEO Health Benefits

- ! Balanced energy
- Stable blood sugar
- Burns off stored fat
- Clear skin & better teeth
- Reduced allergies
- Improved sleep
- Healthier immune system



Nourishing our bodies with
**REAL FOOD AS
NATURE INTENDED**

IT'S ALL ABOUT...



UNPLUGGING
from electronics from
time to time and resting

Reducing stress and giving
your body a chance to

**THRIVE IN THE
MANNER IT EVOLVED**



Bonding with others
FACE-TO-FACE

Getting
out in the
SUN



Playing for
the sake of
PLAYING



Getting
enough
SLEEP

PALEO Lifestyle

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PALEO 101

PALEO

MAGAZINE

modern day primal living

Paleo is a lot more than **JUST A "FAD" DIET.**

EAT PLENTY OF

Healthy fats

Nuts & seeds

Wild fish,
seafood, game

Grass-fed/pastured
meats

Vegetables
& fruits



EAT THIS
NOT THIS

AVOID

Processed
foods

Refined
sugar

Legumes
& soy

Grains



PALEO
Pyramid

NUTS
& SEEDS

FRUIT

FATS

Meats

FISH

VEGETABLES



5 Day MEAL

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APPLE SALAD

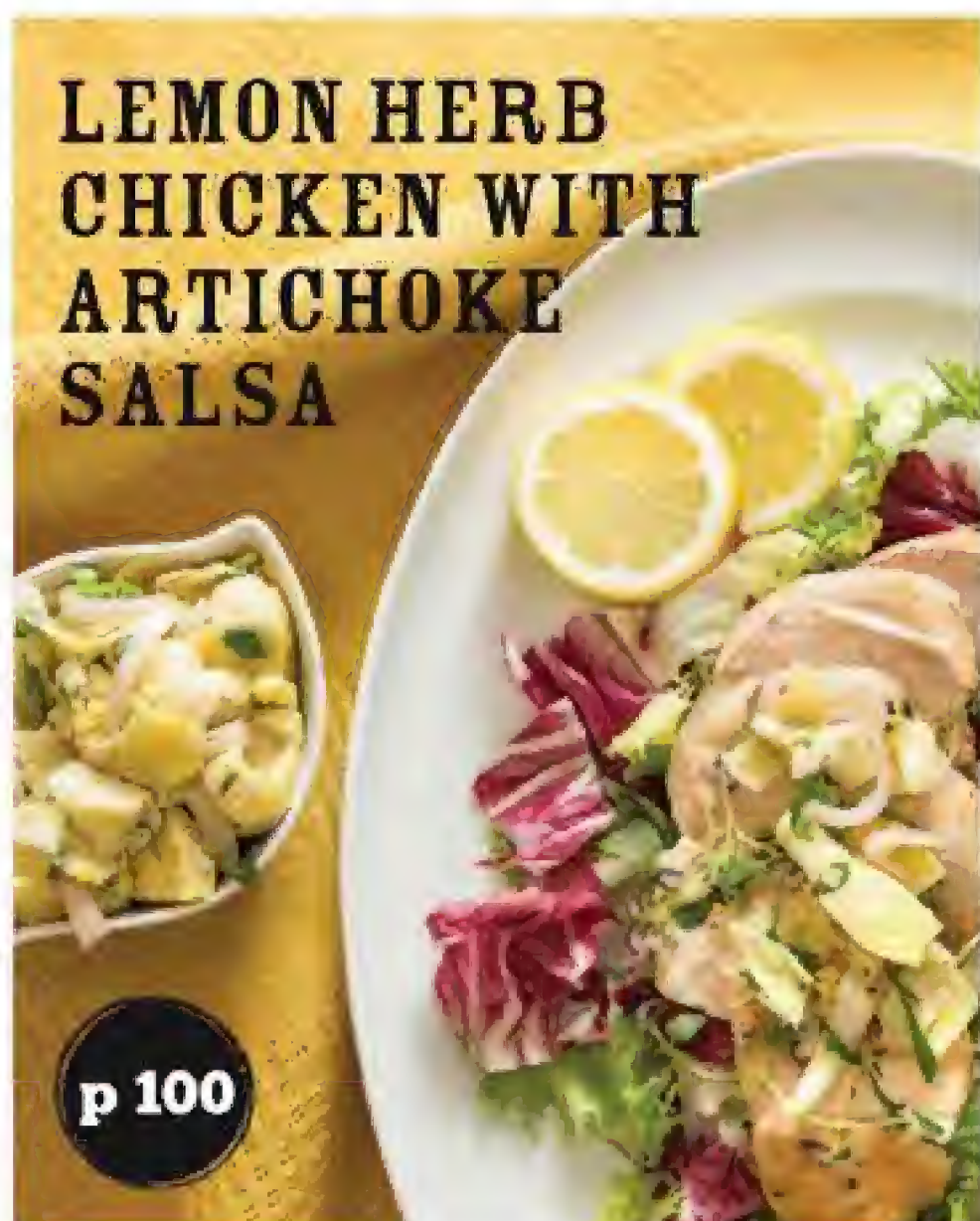
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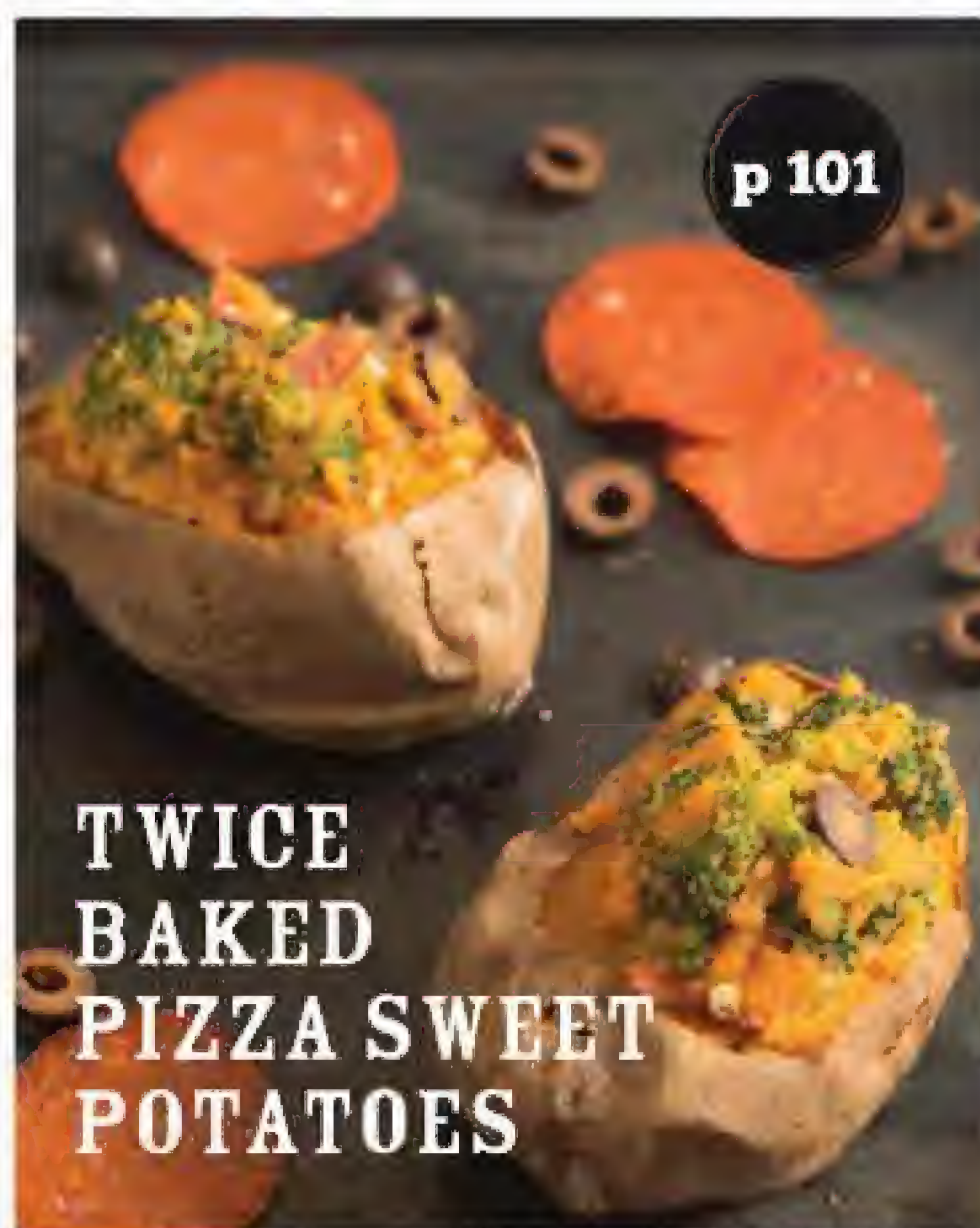
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BAKED
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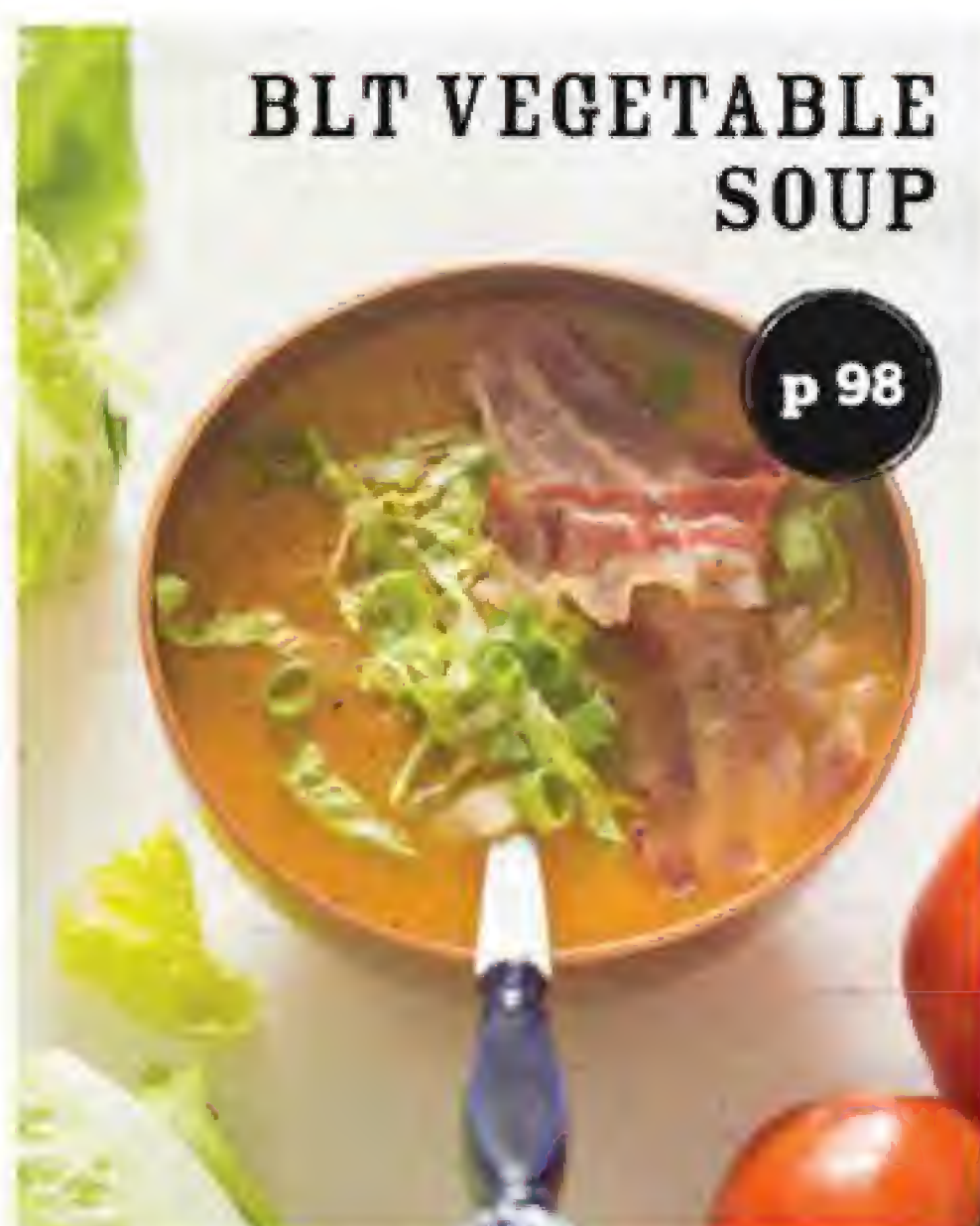
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ZUCCHINI
PASTA WITH
SALMON &
CASHEW SAUCE

PALEO PANTRY LIST

The list of items you can stock in your Paleo kitchen is much, much longer than those you can't. With that said, there are some staples that you'll want to keep on hand to make your life easier. Here's a little list to get you started!

PROTEINS

Wild game, grass-fed meats, pastured/local eggs, free-range chicken, wild-caught seafood, canned wild salmon, and sardines.

FATS

Coconut oil, lard, tallow, duck fat, olive oil, avocado oil, ghee (if tolerated).

VEGGIES

Load up on just about anything you can find! Local, organic is ideal. Focus on non-starchy veggies, but don't shy away from roots and tubers.

FRUITS

Unlike veggies, you want to go easy on the fruit intake (sugar!) and focus on local and/or organically grown berries.

NUTS

Most nuts contain high amounts of omega-6 fatty acids and contain anti-nutrients, so you don't want to over do it. If possible, it's best to soak and sprout them prior to eating. Definitely go easy on the baked goods that call for nut flours.

HERBS & SPICES

Go to town! Load up your cabinets with the dried variety and get in the habit

of using fresh herbs—like basil, parsley, mint and rosemary—whenever you can. Avoid any with added fillers or MSG.

RANDOM THINGS

(to make your life easier) Arrowroot starch, coconut butter, coconut flour, coconut milk (full fat w/o carrageenan or gums), raw, local honey, tapioca starch, vinegars (balsamic, coconut, raw apple, red wine, white wine), coconut aminos, fish sauce.

ONLINE SHOPS

One Stop Paleo Shop
OneStopPaleoShop.com

Thrive Market
ThriveMarket.com

Wild Mountain Paleo
WildMountainPaleo.com

MEATS

Lava Lake Lamb
LavaLakeLamb.com

US Wellness Meats
GrassLandBeef.com

Vital Choice
VitalChoice.com

FATS

Fatworks
FatworksFoods.com

OMghee
OMghee.com

Pure Indian Foods
PureIndianFoods.com

WHY DON'T YOUR RECIPES INCLUDE NUTRITIONAL INFO?

You won't find this info on any of our recipes. While we certainly understand that there are some individuals who need nutritional information (calories, carb/sugar grams, etc.) due to medical reasons or athletic goals, we feel that the vast majority of the population does not need to get caught up in the weighing/measuring/counting grams of every meal. If you are eating a clean Paleo diet—real, whole foods heavy in non-starchy veggies with good proteins & fats—there is zero need to be concerned with grams of this or that.

GET THE SHOPPING LIST



/SCAN THIS PAGE

SERVES 2



Coconut Mango Smoothie

- 1-1/2 cups frozen mango chunks
- 1 medium frozen banana, broken into chunks
- 1 cup water
- 2/3 cup canned coconut milk (full fat)
- 2 TBSP coconut oil
- 1 tsp vanilla extract
- 1/2 tsp ground cinnamon
- 1/4 tsp of ground cardamom
- Unsweetened shredded coconut, for topping *(optional)*

Combine the mango, banana, water, coconut milk, coconut oil, vanilla and spices in a blender. Blend on high until creamy and smooth. Pour into a glass and top with shredded coconut.

Almond Chai Breakfast Clusters

- 1 cup raw almonds
- 1 cup raw sunflower seeds
- 2 tsp ground cinnamon
- 1 tsp ground ginger
- 1/2 tsp ground cardamom
- 1/2 tsp sea salt
- 1 cup unsweetened,
shredded coconut
- 1/2 cup raisins, dried currants or
dried cranberries
- 1/2 cup creamy, raw almond butter
(unsweetened)
- 1/4 cup raw honey
- 1/4 cup unsweetened applesauce
- 2 TBSP ground flaxseeds

MAKES
12

Line 12 cups of a standard muffin pan with paper liners. Set aside.

In a food processor fitted with the steel blade, process the almonds, sunflower seeds, cinnamon, ginger, cardamom and salt until the nuts are finely chopped, about 10–15 seconds. Transfer the mixture to a large bowl.

Stir in the coconut and raisins.

In a small saucepan over low heat, whisk together the almond butter, honey and applesauce. Whisk constantly until the almond butter is melted and the mixture is smooth.

Remove from the heat and whisk in the ground flaxseeds. Pour over the nut mixture and stir to combine thoroughly, making sure all of the pieces are coated.

Divide the mixture evenly between the 12 muffin cups. Wet hands lightly with water and press the mixture firmly into the cups to create tightly packed clusters. Freeze until firm, about 30 minutes. Store the clusters in an airtight container in the refrigerator or freezer.



MAKES
25-30

4-5 medium sweet potatoes (2 lb),
peeled and shredded
(about 10 cups shredded)
6 large eggs, lightly beaten
1/4 cup coconut flour, sifted
1 TBSP ground cinnamon
1 tsp sea salt
coconut oil, for cooking

Optional toppings: warm berries, applesauce,
maple syrup and/or almond butter

Preheat the oven to 250°F. Place a wire rack on a baking sheet. Set aside.

Place the shredded sweet potatoes in a large bowl. Add the eggs, coconut flour, cinnamon and salt. Stir until combined.

Heat 2 tablespoons of coconut oil in a large skillet (preferably cast iron) over medium heat. Drop packed 1/4-cupfuls of the fritter mixture into the pan. Use a spatula to gently press down on the mounds and spread them out slightly. Cook for about 3 minutes per side, or until browned and crisp. Transfer the cooked fritters to a prepared wire rack/baking sheet and place in the oven to keep warm while you cook the rest.

Continue to cook the fritters until all of the mixture has been used, adding more coconut oil to the pan as needed.

Serve the fritters with desired toppings. (Great with a side of bacon!)



- 1 lb asparagus, trimmed
- 3/4 lb red potatoes, cut into 3/4-inch cubes
- 12 large eggs
- 1/2 cup canned coconut milk (full fat)
- 1 tsp sea salt
- 1/4 tsp black pepper
- 1/2 cup chopped fresh parsley
- 1/4 cup finely chopped scallions
- 2 TBSP chopped fresh mint
- 4 oz soft goat cheese, crumbled *(optional)*
- coconut oil, for greasing the dish

Preheat the oven to 375°F. Grease a 2-quart casserole dish (or similar-size baking dish) with coconut oil. Set aside.

Bring a medium pot of water to boil over high heat. Add the asparagus and cook until just tender and bright green, about 2 minutes. Drain and set aside.

Place the potatoes in a medium pot and cover by 1 inch with water. Bring to a boil over high heat. Reduce the heat to medium-low and simmer until the potatoes are just tender, 8–10 minutes. Drain and set aside.

In a large bowl, whisk together the eggs, coconut milk, salt and pepper. Add the parsley, scallions, mint, crumbled goat cheese (if using) and potatoes. Stir to combine. Pour into the prepared baking dish. Scatter the asparagus on top and press down gently.

Bake until golden brown on top and the eggs are just set in the center, about 35–40 minutes. (If the top browns too quickly, cover with a lid or sheet of parchment paper.) Cool for 10 minutes before slicing and serving.

Spring Breakfast Bake

SERVES
6-8



Broccoli, Leek & Red Potato Hash

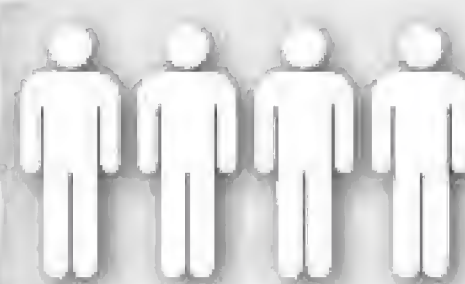
3 TBSP coconut oil, divided
1-1/2 lb red potatoes, scrubbed and diced
1 medium head broccoli, cut into florets
2 medium leeks, white and light green parts only, diced
Pinch of crushed red pepper flakes
To taste sea salt and black pepper
8 large eggs, prepared any style

Heat 2 tablespoons of oil in a large skillet (preferably cast iron) over medium heat. Add the potatoes and stir to coat with oil. Cover and cook for 10 minutes.

Uncover and add the remaining 1 tablespoon of oil, the broccoli and the leeks. Stir to combine. Cook, stirring occasionally, for about 10 minutes, or until the vegetables are tender and the potatoes have browned.

Add the crushed red pepper and season to taste with salt and pepper. Serve the hash with eggs (cooked any style).

SERVES 4



Kale & Roasted Potato Salad

with Curry Deviled Eggs

SERVES 4



For the potatoes:

- 1 lb red potatoes, scrubbed and cut into 3/4-inch cubes
- 1 TBSP melted coconut oil (or avocado oil)
- 1/4 tsp dried thyme
- To taste sea salt and black pepper

For the deviled eggs:

- 6 large eggs, boiled, cooled, shells removed
- 1/4 cup mayonnaise
- 1/2 tsp Dijon mustard
- 1/2 tsp curry powder
- 1/2 tsp sea salt
- Finely chopped scallions, for garnish (optional)

For the salad:

- 1 bunch kale, stems removed, thinly sliced
- 1 medium shallot, diced
- 2 TBSP olive oil (or avocado oil)
- 2 TBSP apple cider vinegar
- 1 TBSP maple syrup or honey
- 1 tsp Dijon mustard

Preheat the oven to 400°F. Line a rimmed baking sheet with parchment paper. Set aside.

In a large bowl, toss the potatoes with the coconut oil, thyme and a generous pinch of both salt and pepper. Spread evenly on the prepared baking sheet. Roast for 30–35 minutes, or until tender and browned in spots. Let cool for 15 minutes.

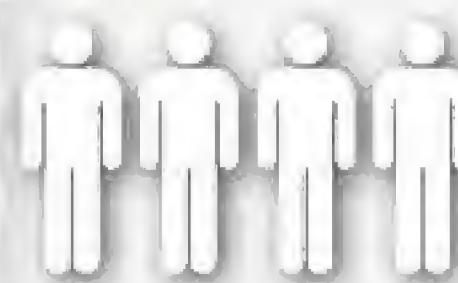
Meanwhile, make the deviled eggs: Cut the cooled eggs in half lengthwise. Carefully remove the yolks and place them in a medium bowl. To the yolks add the mayonnaise, mustard, curry powder and salt. Mash with a fork until smooth. Using a piping bag or spoon, fill the egg whites with the yolk mixture. Top with scallions (if using) and refrigerate until ready to serve.

Make the salad: To the bowl with the cooled potatoes, add the kale and shallot. Toss to combine.

In a small bowl, whisk together the olive oil, vinegar, maple syrup and mustard. Pour the dressing over the salad and toss to coat. Season to taste with salt and pepper. Refrigerate until ready to serve. Serve the salad with the deviled eggs on the side.

Cilantro Lime Turkey Burgers with Chili-Roasted Carrots

SERVES 4



For the carrots:

- 1 lb carrots, peeled
- 2 TBSP melted coconut oil (or avocado oil)
- 1 tsp raw honey
- 1 tsp chili powder
- 1/2 tsp ground cumin
- 1/4 tsp sea salt
- 1/4 tsp black pepper

For the burgers:

- 1 lb ground turkey
- 1/3 cup finely chopped, fresh cilantro
- 1 tsp ground cumin
- 1/2 tsp onion powder
- 1/2 tsp sea salt
- 1 tsp finely grated lime zest (about 1 lime)
- 1 TBSP fresh lime juice (about 1 lime)
- 1 TBSP coconut oil

Romaine lettuce leaves, sliced tomatoes and sliced onions, for serving *(optional)*

Preheat the oven to 400°F. Line a baking sheet with parchment paper. Set aside.

Make the carrots. Cut each carrot on the diagonal into 3–4 pieces. Place in a large bowl and toss with the oil, honey, chili powder, cumin, salt and pepper. Arrange on the prepared baking sheet in an even layer. Roast for 30–35 minutes, stirring once halfway through, until tender and browned in spots.

While the carrots are cooking, make the burgers. Combine the turkey, cilantro, cumin, onion powder, salt, lime zest and lime juice in a large bowl. Form the mixture into 4 patties about 1/2 inch thick each.

Heat the oil in a large skillet over medium-high heat. Cook the burgers 6–8 minutes per side, or until an instant-read thermometer registers 165°F.

Serve the burgers wrapped in lettuce leaves, topped with tomatoes and onions, if desired. Serve with the chili-roasted carrots on the side.



Tuna & Green Apple Salad

- 3 (6-oz) cans tuna, packed in water, drained
- 1 large green apple, such as Granny Smith, cored and diced
- 1/2 cup mayonnaise
- 1/3 cup dried cranberries, raisins or dried currants
- 1/4 cup roasted, salted sunflower seeds *(optional)*
- 1/4 cup finely chopped scallions
- 1/4 cup finely chopped fresh parsley
- 1 TBSP Dijon mustard
- To taste sea salt and black pepper

Mixed greens, for serving

Place the drained tuna in a large bowl and flake with a fork.

Add the apple, mayonnaise, cranberries, sunflower seeds (if using), scallions, parsley and mustard. Stir gently to combine. Season with salt and pepper to taste. Store in an airtight container in the refrigerator until ready to serve. Serve over a bed of mixed greens.



BLT Vegetable Soup

8 slices bacon
2 medium leeks, white and light green parts only, diced
2 medium celery stalks, chopped
4 cloves garlic, minced or pressed
1/2 tsp ground cumin
1/4 tsp dried oregano
1 (28-oz) can diced tomatoes
1-1/2 cups chicken broth
To taste sea salt and black pepper

Thinly sliced romaine lettuce, for topping
Thinly sliced scallions, for topping

SERVES 4



Place a large soup pot or Dutch oven over medium heat. Add the bacon and cook until crisp and the fat has rendered. Remove with a slotted spoon and set aside. Once cool, crumble and reserve for serving.

To the bacon fat in the pot, add the leeks and celery. Cook, stirring occasionally, for 5–6 minutes.

Add the garlic, cumin and oregano. Stir for 1 minute.

Add the tomatoes and broth. Bring to a boil, then reduce the heat to low, cover and simmer for 10–15 minutes. Purée the soup using an immersion blender (or regular blender), using caution with hot liquids.

Season to taste with salt and pepper. (The soup can be prepared ahead and stored in an airtight container in the refrigerator for up to 3 days.)

Serve bowls of the soup topped with shredded lettuce, scallions and crumbled bacon.



SERVES 4



Taco-Stuffed Peppers

1 TBSP coconut oil
 3/4 lb ground beef
 1/2 medium head cauliflower, grated on the large holes of a box grater
 1/2 medium yellow onion, diced
 2 cloves garlic, minced
 2 tsp chili powder
 1/2 tsp ground cumin
 1/2 cup tomato sauce
 To taste sea salt and black pepper
 2 large yellow, red or orange bell peppers, halved lengthwise and seeded

Chopped scallions, for serving
 Diced avocado, for serving

Preheat the oven to 350°F.

In a large skillet, heat the oil over medium-high heat. Add the ground beef and cook, stirring occasionally to break up the meat, until no longer pink.

Reduce the heat to medium and add the cauliflower and onion. Cook, covered, for 6–8 minutes, stirring occasionally.

Add the garlic, chili powder and cumin. Stir to mix well.

Add the tomato sauce and stir to combine. Season with salt and pepper. Remove from the heat.

Arrange the peppers, cut-side up, in a baking dish. Fill the peppers with the meat mixture. Bake, uncovered, for 20–30 minutes, or until the peppers have softened. Serve topped with scallions and avocado.

Lemon Herb Chicken with Artichoke Salsa

For the chicken:

- 4 (5–6-oz) chicken breasts
- 1/4 cup olive oil
- 1/4 cup fresh lemon juice (about 2 lemons)
- 1 TBSP finely grated lemon zest (about 1 lemon)
- 1 TBSP honey
- 2 tsp Italian seasoning
- 1 tsp sea salt
- 1/2 tsp freshly ground black pepper

For serving:

Mixed baby greens

For the salsa:

- 1 (14-oz) can artichoke hearts packed in water, drained and roughly chopped
- 1 medium shallot, diced
- 2 TBSP finely chopped fresh parsley
- 1 TBSP fresh lemon juice (about 1/2 lemon)
- 1 TBSP olive oil
- 1 tsp honey
- 1/2 tsp Dijon mustard
- 1 clove garlic, minced
- 1/4 tsp dried thyme
- To taste sea salt and black pepper

Prepare the chicken: Place the chicken in a shallow dish. In a small bowl, whisk together the olive oil, lemon juice, lemon zest, honey, Italian seasoning, salt and pepper. Pour the marinade over the chicken and turn to coat. Cover and refrigerate for 4–12 hours.

Heat a grill or grill pan to medium-high. Oil the grates. Remove the chicken from the marinade and grill for about 8 minutes per side, or until a meat thermometer registers 165°F. Let rest for 5–10 minutes before serving.

Meanwhile, make the salsa: Add all of the salsa ingredients to a medium bowl. Stir to combine.

To serve, slice the chicken on the diagonal and serve over mixed greens. Top with the salsa.



SERVES 4



Twice-Baked Pizza Sweet Potatoes

SERVES 4



For the potatoes:

4 medium sweet potatoes (choose potatoes of equal shape and size)
1 TBSP extra virgin olive oil
To taste sea salt

For the stuffing:

1 TBSP coconut oil
1 cup broccoli florets, finely chopped
8–10 slices uncured pepperoni, chopped
1/4 cup finely chopped yellow onion
2–3 TBSP chopped black olives
2 TBSP tomato sauce
1/2 tsp garlic powder
1/2 tsp onion powder
To taste sea salt and black pepper

Preheat the oven to 400°F. Arrange the potatoes in a large baking dish. Prick each potato a few times with the tip of a knife. Rub the skins with olive oil, then sprinkle with salt. Bake for 50–60 minutes, or until tender.

When the potatoes are cool enough to handle, carefully cut off a slice from the top of each to expose the flesh of the potato. With a small spoon, scoop out the potato flesh and place into a mixing bowl. Note: Take care to leave behind about a 1/2-inch-thick potato “shell.” Baked sweet potatoes are more delicate than white potatoes, so work carefully.

Mash the coconut oil into the potato flesh. Stir in the broccoli, pepperoni, onion, olives, tomato sauce, garlic powder, onion powder, salt and pepper. Spoon the filling back into each potato shell, mounding it up as needed. (Can be prepared up to this point 1 day in advance. Cover and refrigerate.)

Cover the stuffed potatoes loosely with a piece of parchment paper. Return to the oven for 10–15 minutes to heat through.

To freeze: Prepare the potatoes up through step 3. (Cool completely if they are still warm.) Place in a single layer in a freezer-safe container. Cover tightly and freeze for up to 2 weeks. To reheat, thaw the potatoes overnight in the refrigerator. Bake, loosely covered with parchment paper, at 400°F for 25–30 minutes or until heated through.

SERVES 4



Green Vegetable Minestrone with Arugula Mint Pesto



For the pesto:

- 1/4 cup toasted almonds
- 1-1/2 cups baby arugula
- 3/4 cup fresh mint leaves
- 1 clove garlic
- 2 TBSP fresh lemon juice (about 1 lemon)
- 1/4-1/3 cup extra virgin olive oil
- To taste sea salt and black pepper

For the soup:

- 2 TBSP coconut oil
- 1 medium yellow onion, chopped
- 2 medium celery stalks, chopped
- 2 medium zucchinis, chopped
- 1 medium fennel bulb, trimmed, cored and thinly sliced
- 3 cloves garlic, minced or pressed
- 3-4 cups thinly sliced kale
- 3-4 cups chicken broth
- 1 cup frozen peas
- 2-3 cups cooked, shredded chicken (from about 1 lb cooked chicken thighs)
- To taste sea salt and black pepper
- baby arugula, for garnish (optional)

Make the pesto: In a food processor fitted with the steel blade, combine the almonds, arugula, mint, garlic and lemon juice. Pulse to form a paste. With the machine running, slowly pour in the oil until the desired consistency is reached. Season to taste with salt and pepper. Set aside.

Make the soup: Heat the coconut oil in a large pot over medium heat. Add the onion, celery, zucchini and fennel. Cook, stirring occasionally, for 6-8 minutes.

Add the garlic and stir for 1 minute.

Stir in the kale, then add the broth. Bring to a boil, then reduce the heat to low and simmer for 6-8 minutes.

Stir in the peas and chicken and cook, stirring occasionally, for 1-2 minutes or until heated through. Season to taste with salt and pepper. Serve bowls of the soup topped with a dollop of the pesto and a handful of arugula (if using).

Thai Beef Salad

SERVES 4



For the salad:

- 1 lb sirloin steak
- 3 TBSP fresh lime juice (about 3 limes)
- 2 TBSP fish sauce
- 2 TBSP finely grated, fresh ginger
- 1 TBSP extra virgin olive oil
- 2 garlic cloves, minced or pressed
- 2 tsp raw honey
- 5 cups chopped leaf lettuce
- 1 medium bell pepper (yellow, red or orange), seeded and thinly sliced
- 1/2 medium English cucumber, cut into strips
- 1 jalapeño pepper, seeded and finely chopped (optional)
- 1/4 cup thinly sliced scallions
- 1/4 cup mint leaves, chopped
- 1/4 cup roasted cashews, chopped (or sunflower seeds)

For the dressing:

- 2 TBSP fresh lime juice (about 2 limes)
- 2 TBSP fish sauce
- 2 tsp extra virgin olive oil
- 1 tsp raw honey

Place the steak in a glass baking dish. Whisk together the lime juice, fish sauce, ginger, olive oil, garlic and honey. Pour over the steak and turn to coat. Cover and refrigerate for at least 2 hours or overnight.

Heat a grill or grill pan to medium-high heat. Remove the steak from the marinade and grill for 4–5 minutes per side for medium (or to your preference). Transfer to a plate to rest for 10 minutes. Slice thinly into small, bite-size pieces.

In a large bowl, combine the lettuce, bell pepper, cucumber, jalapeño (if using), scallions, mint and cashews. Add the steak and toss gently to combine.

In a small bowl, whisk together all of the dressing ingredients. Pour over the salad and toss to coat. Serve immediately.

Zucchini Pasta with Salmon & Cashew Cream Sauce

SERVES 4



- 1 lb wild-caught salmon
- 1 TBSP extra virgin olive oil
- 1 medium lemon
- To taste sea salt and black pepper
- 1 cup raw cashews, soaked in water for 3–8 hours
- 2/3 cup water, plus more as needed
- 1/2 tsp garlic powder
- 1/2 tsp onion powder
- 1 TBSP coconut oil
- 4 medium zucchinis, cut into noodles using a spiralizer
(or use a vegetable peeler to slice into thin ribbons)
- For garnish chopped fresh parsley

Preheat the oven to 375°F. Place the salmon in a glass baking dish. Drizzle with the olive oil. Cut the lemon in half and set one half aside. Squeeze the remaining half over the salmon. Sprinkle with salt and pepper. Bake for 15–20 minutes, or until the fish flakes easily with a fork. Set aside.

While the fish is cooking, make the cream sauce. Drain the cashews and place in a blender or food processor. Add 2/3 cup of water, the garlic powder and the onion powder. Squeeze in the juice from the remaining lemon half. Blend until creamy and smooth. Taste and season with salt and pepper as desired. (Add a bit more water if needed to thin out the sauce, but it should be rich, so be careful not to add too much.)

Heat the coconut oil in a large skillet over medium heat. Add the zucchini noodles. Sauté for 5 minutes or until slightly softened.

While the noodles cook, flake the salmon into bite-size pieces with a fork.

Remove the zucchini noodles from the heat. Add enough sauce to coat the noodles, then toss gently to combine. Add the flaked salmon and toss again. Serve topped with chopped parsley for garnish.

Chicken and Egg Sushi Roll

Pete Evans



Bonus Recipe!

Serves: 4–6
Yield: 32 pieces
Preparation time: 15 minutes
Cooking time: 4 minutes

6 free-range organic eggs
1 TBSP coriander, chopped
2 TBSP coconut oil
Pinch of sea salt

4 toasted nori sheets
2 chicken thighs, cooked, meat shredded
2 TBSP mayonnaise
1 small carrot, sliced into thin batons
1 avocado, sliced into strips
To serve toasted white and black sesame seeds
To serve tamari
To serve wasabi

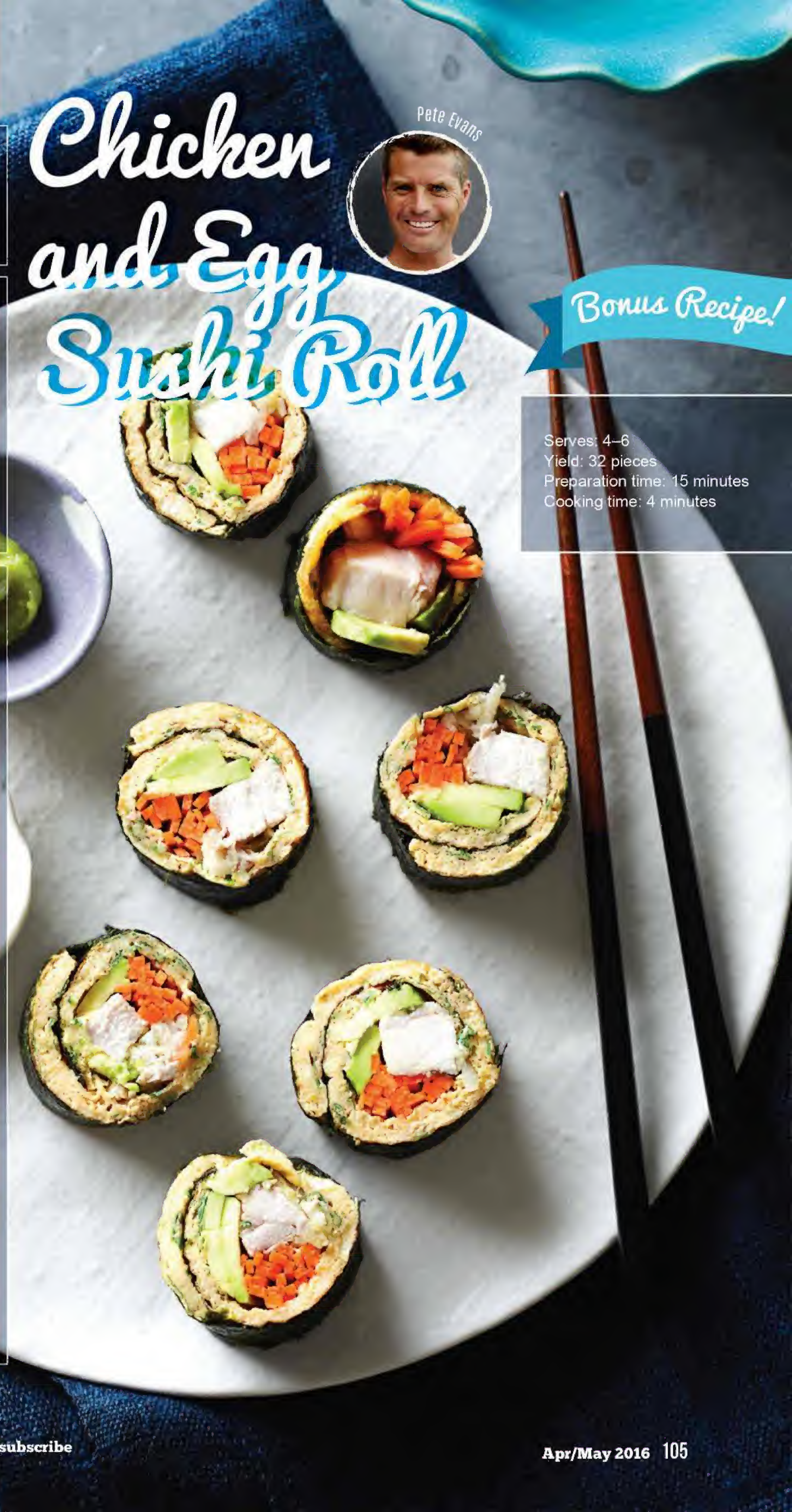
Mix together the eggs, coriander and a pinch of salt in a bowl and set aside.

To make the omelette, heat an 8-inch nonstick pan over medium heat and add 1 teaspoon of coconut oil. Once the coconut oil is hot, add 5 tablespoons of egg mixture to the pan and swirl the pan to coat the base with the eggs. Cook until the egg mixture is lightly golden underneath and moist on the top (40–60 seconds). Slide the omelette out of the pan and onto a cutting board. Repeat with the remaining egg mixture to form 4 omelettes. Set aside to cool.

Place a nori sheet on the workbench or bamboo sushi mat. Lay 1 piece of omelette on top and trim the top and bottom edges of the omelette so it's even with the nori sheet and the omelette is not overhanging.

Spread on 1 teaspoon of mayonnaise, then layer the chicken, avocado and carrot across the edge closest to you. Begin to tightly wrap the roll all the way to the end. Trim the ends with a sharp knife, then cut into 2-centimeter round pieces. Repeat with the remaining nori, omelette and fillings.

Place the sushi pieces on a platter and sprinkle with sesame seeds, tamari and wasabi.



Steph Gaudreau



Melissa Joulwan



From Russia

with

Love

In each issue, Melissa and Steph bring you the story of a traditional recipe and adapt it to fit into a healthier Paleo lifestyle. This time, they take a historical look at everybody's favorite protein: meat on a stick.

Let's just agree right out of the gate that there is nothing as satisfying, fun or inherently primal to eat than meat on a stick, aka shish kebabs. They're usually cooked over some kind of open fire, so there are all those irresistible, charred, crispy bits—and kebabs in all their various forms consistently show up in boisterous places: carnivals, street carts, family cookouts, summer holidays and camping adventures. Bonus: It's generally accepted practice to eat shish kebabs with your hands, lick your fingers and, if the spirit moves you, maybe howl at the moon. What dining experience is better than that?!

We should expect nothing less from a dish that was reportedly created when Turkic tribes, marauding from Central Asia to Anatolia, used their swords to roast cubes of meat over open fires. The romance of that image aside, some argue the first recorded mention of shish kebabs can be found in Homer's *Odyssey*:

*There sat Nestor among his sons as friends around them
decked the banquet, roasted meats and skewered strips for broiling.*

Whatever the origin, there's no denying that meat on a stick has long been a popular and manly meal all over the world.

We're going to leap forward in time now to 16th-century Russia and Ukraine to check in with the Cossacks. Their kebabs were known as "shashlik" and were cooked over wood fires that imparted a delightfully smoky flavor to the meat. Traditionally, the kebabs were made from lamb that had been marinated in wine and spices to tenderize it and to disguise its gamier notes. By the early 20th century—just in time for the Russian Revolution—the kebabs were a staple in Moscow, St. Petersburg and other soon-to-be-Soviet cities. Shashlik was one of the few traditional Russian dishes to make it through the Bolshevik revolution relatively unchanged.

According to lore, Leonid Brezhnev—the ruler of the USSR from 1964 until he died in 1982—was a devoted hunter and enthusiastic consumer of shashlik. He led parties of political leaders and dignitaries, including cosmonaut Yuri Gagarin, to track deer in the hunting grounds near Moscow. Then, after a day of tromping about in the woods, they'd return to civilization for a feast of marinated kebabs, salads and—of course—plenty of vodka.

But shashlik was the great equalizer, and was enjoyed by Soviet citizens throughout the vast expanse of the USSR. As Olga and Pavel Syutkin wrote in the *CCCP Cook Book*, "...sinking your teeth into juicy chunks of skewered lamb or beef was like a dream for many Soviet citizens."

Whether at a backyard barbecue, an urban food truck or a camping trip in the Caucasus, shashlik is usually accompanied by simple salads of fresh vegetables. Although Russian cooks argue about the best marinades—wine versus lemon juice versus vinegar—their tradition grudgingly acknowledges that meat on a stick, cooked over a searing flame, is one of the finest ways to bring people together in celebration of food and life.

For our recipes, we've opted for lamb and a lemon-and-seltzer-based marinade to tenderize the meat and infuse it with the earthy spices. The marinade will work equally well with cubes of pork or chicken, if you prefer. For the side salad, we adapted a sweetly crunchy combination of carrots and dried fruit in honor of spring.

And to you we say, *Priyatno appetita!* 🍴



SHASHLIK

Serves 4–6 // Prep 5 min
Marinate 2 hrs // Cook 15 min

Marinade

- 1/2 cup seltzer water
- 2 TBSP lemon juice
- 1/4 cup fresh dill, minced
- 4 cloves garlic, minced
- 2 bay leaves
- 4 tsp ground paprika
- 1 tsp ground coriander
- 1 tsp ground cumin
- 1 tsp salt
- 1/2 tsp ground black pepper

Kebabs

- 1-1/2 lb boneless lamb leg or shoulder, cut into 2-inch pieces
- 3 small yellow onions, cut into eighths

Place the marinade ingredients in a glass bowl and whisk to combine. Add the lamb, toss to coat, and marinate for at least 2 hours or up to overnight.

When you're ready to eat, thread the meat and onions onto skewers.

To cook on a gas grill: Preheat the grill on high with the lid closed until very hot, about 10–15 minutes. Grill the skewers uncovered, turning every 1–2 minutes, until the lamb is cooked to desired doneness, 7–8 minutes total for medium-rare to medium.

To broil in the oven: Heat the broiler on high. Place the skewers on a broiler pan and broil, flipping once, until the cubes are evenly browned but still pink in the middle, about 2–4 minutes per side.

To roast in the oven: Preheat the oven to 375°F. Place the skewers on a baking sheet and roast, flipping once, until the cubes are evenly browned, about 12 minutes for medium-rare or 15 minutes for medium to medium-well.

CARROT SALAD

Serves 2–4 // Prep 10 min

- 1–2 TBSP homemade mayo
(bit.ly/well-fed-mayo)
- 1 TBSP honey
- Pinch of salt
- Pinch of ground black pepper
- 3 large carrots, peeled and grated
- 1/3 cup raisins, minced dried apricots or chopped dates
(or a mix of all three)
- 1/2 cup walnuts, chopped

In a large bowl, place the mayo, honey, salt and pepper. Whisk to combine. Add the carrots, dried fruit and walnuts, then toss until coated with the dressing. Allow the salad to rest at room temperature for 10 minutes so the flavors can meld.

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AVERAGE JOE PALEO

Tyler Miles



Getting old can really SUCK.

If you happen to be wondering why I'm coming out swinging today, it's because I've been suffering through a series of injuries of late that really have me wishing I were 25 years old again.

It's not that I didn't hurt myself in those days. I've been exercising with intent and engaging in martial arts for a long time now. Shit happens. The difference is, back then, whenever I suffered a tweak, pull or strain, it wouldn't be more than a few days before I was back training. Now, a minor injury can have me on the shelf for weeks!

WHAT GIVES?

Take this, for example. A couple of weeks ago, I was getting ready to knock out some kettlebell cleans and presses. On the first rep of the first set, I felt my back grab at me during the clean portion of the lift. Keep in mind, this was a routine being performed with the specific intent of staying healthy, but here I am, still wincing and groaning while walking around the house, over three weeks later!

Umm, Tyler, if you remember, the basement was freezing that morning. To boot, your warm-up was minimal at best, and I can't remember the last time you had stretched, had a date with the lacrosse ball or hit the foam roller. Oh, and it probably wasn't all that bright to finish the programmed workout for the day despite hurting your back on the first rep of the first set. Then again, I'm not a doctor, so what do I know?

OK. Fine. Well, what about the torn hamstring I suffered during a recent grappling tournament? Sure, I'm walking around a bit better and have been able to start squatting again—but sprints, deadlifts or Olympic lifts of any kind are still totally out of the question. I swear, 10 years ago, I would have been PRing my 100-meter sprint within four weeks of experiencing that injury.

Yeah. Tyler, again, you hadn't been working on flexibility in ages. At the competition, warm-ups consisted of some awkward bouncing around and "arm shakes," which was probably more a product of nervous energy than an actual warm-up. On top of that, you were most certainly still dehydrated after a painful weight cut. Oh, and not for nothing, but aren't you supposed to tap before things pop?



Alright, point taken. But what about that hip flexor strain from last year? That was ridiculous. I was squatting a 5RM (for an all-time best, mind you) and on the last rep, my hip flexor "popped." I swear, I wasn't able to squat, run or jump for months after that one. In my 20s, I was never afflicted with anything like that!

Here we go again... Is your memory failing in your old age, too? Because if I remember correctly, you had just gotten off a cross-country flight spanning three time zones. You slept like complete crap the night before, but got up at the crack of dawn anyway to get your workout in. Not stopping there, you thought it would be "wise" to go for broke on back squats, which aren't taxing or anything... You warmed up like crap and were totally dehydrated again. But yeah, I can't imagine why you ended up hurting yourself. Weird.

TOUCHÉ.

Well, injuries aside, I also don't feel like I can throw down food the way I used to. Actually, let me rephrase that—throwing food down isn't my issue, it's the effects of said activity that have changed since my younger days. I swear I gained 10 pounds coming out of the holidays! That never used to happen...

How are you even surprised about this one? It's a good thing you didn't keep a food log, because there's no way Cain and the gang could have kept you onboard as a writer for Paleo Magazine if they were privy to your food choices. Let's keep this one simple, because obviously you can't handle much else... You ate a lot of food. Yeah, you stayed away from "gluten"—great work, by the way—but certainly made up for it by stuffing yourself with just about everything else. You drank several glasses of wine most nights. Are tortilla chips Paleo, by the way? Despite all that, your exercise volume was way down. You shared a room with the kiddos, too, so sleep was sketchy at best. So let's tally this up: more calories, less exercise and compromised sleep. I'm sorry, what was your question again?

SMART-ASS.

On a serious note, maybe getting old isn't the problem. Maybe "age" is just the whipping boy of poor behaviors and bad decision making. Perhaps we use it as an excuse not to change the poor habits we were once able to get away with. None of that stuff really mattered because, in those days, our bodies could bounce back from just about anything we threw at them, and we would still improve.

It's much easier to blame our maladies—injuries, weight gain, poor performance—on getting old. And yes, I totally accept the idea that at some point, age does matter. But too often, we use it as an excuse. A crutch. I think that's because burning time warming up, stretching, foam rolling and sleeping eight to nine hours every night isn't always sexy. Sometimes, it's not even possible given our time constraints and obligations with work or family.

That's all well and good, and at some point, you need to prioritize things to the best of your ability. It's funny how injuries can change that prioritization, though, and in a perfect scenario, elicit corrective action.

Most of us, though, just blame it on getting old. 🐢

T R A I N L I K E

A

B E A S T

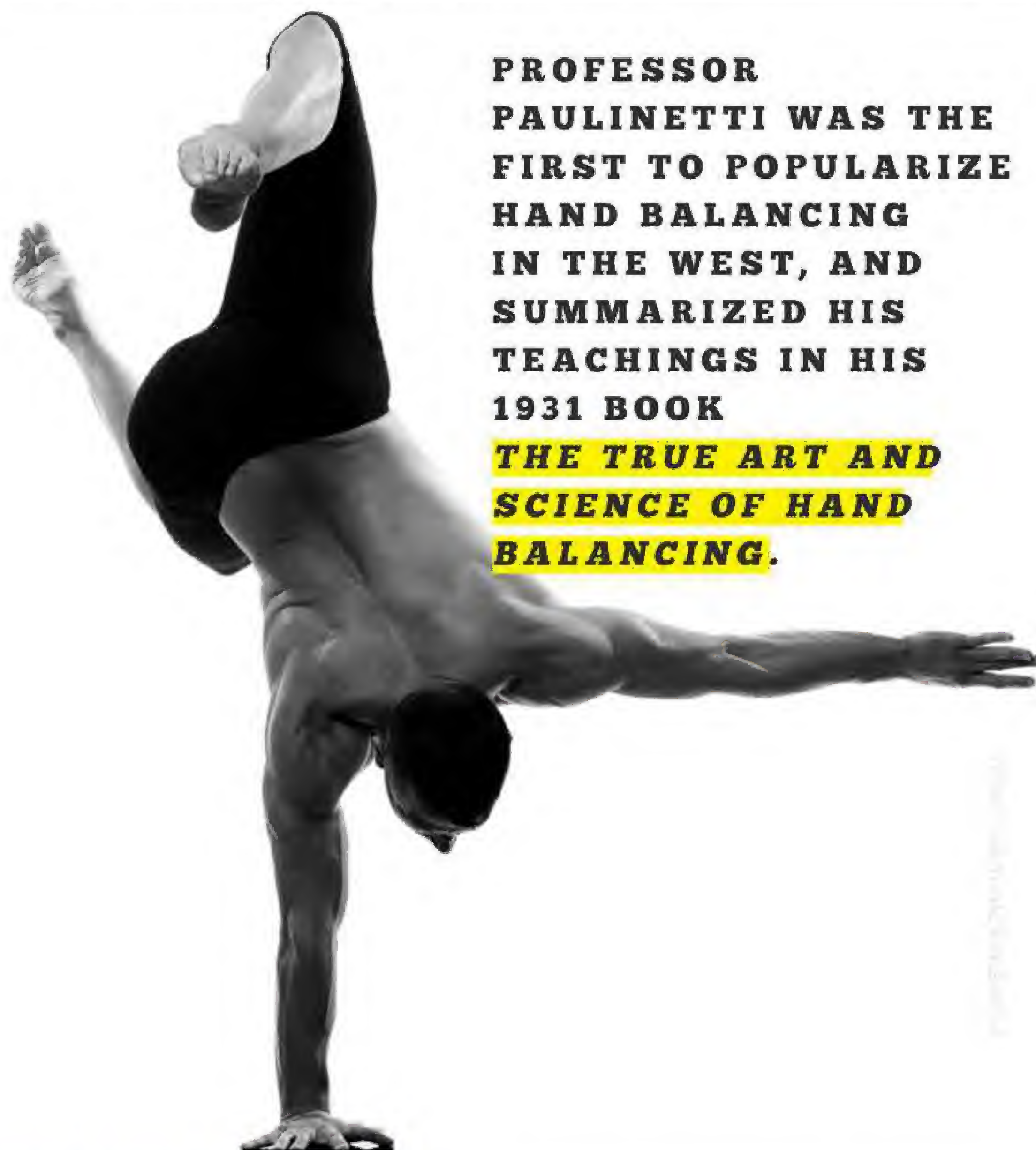
**ANIMAL
FLOW
101**

► BY MIKE FITCH

► PHOTOS BY MATT ROY PHOTOGRAPHY

get this question all the time. I'll be at the park, or tucked away in a corner at a busy gym, when I notice people looking. They're trying to look like they aren't staring, but eventually their curiosity gets the best of them.

"What are you doing? It kind of looks familiar, but I can't exactly place it. **CAN I TRY IT?"**



PROFESSOR PAULINETTI WAS THE FIRST TO POPULARIZE HAND BALANCING IN THE WEST, AND SUMMARIZED HIS TEACHINGS IN HIS 1931 BOOK *THE TRUE ART AND SCIENCE OF HAND BALANCING*.

IT'S CALLED ANIMAL FLOW.

And it might look familiar because it is heavily influenced by many different body-weight disciplines, from gymnastics and parkour to breakdancing and hand balancing. What makes Animal Flow really special, though, is the way we put it all together and use the practice of it to improve your overall movement.

ANIMAL FLOW IS A MOVEMENT-FOCUSED PROGRAM THAT USES QUADRUPEDAL AND GROUND-BASED EXERCISES TO RECONNECT YOUR BODY TO ITSELF.

The benefits of all of this are pretty powerful: increased mobility, greater flexibility, enhanced stability, more power, longer endurance, advanced skills and improved neuromuscular communication.

So what exactly is it? The quick answer is that Animal Flow is a movement-focused program that uses quadrupedal and ground-based exercises to reconnect your body to itself. The practice is made up of multiple components, each designed to elicit specific results.

First, there's the "animal" component, where you find exercises that mimic the movements of animals. We center these around the Ape, Beast and Crab (the ABCs). We also use a lot of movements that don't look like animals, but are nonetheless still based on keeping your limbs connected to the ground. (We'll show you how to perform a few of those below.)

Second, there's the "flow" component, which is all about seamless movement, or being able to transition from one movement to the next with as much fluidity as possible. Once >>>

you've learned the basic moves, you can put them together in an infinite number of ways, flowing wherever and whenever you want.

One of the most important things Animal Flow does is improve your body's own communication. This includes how well you can consciously communicate with your body and coordinate movement, but also how your body communicates with itself on a subconscious level.

All Animal Flow movements are quadrupedal, meaning both hands and feet are in contact with the ground. This sets the stage perfectly for communication. For example, imagine holding yourself in the Beast position described below. Having both hands and feet in contact with the ground forces your body to exchange information about where it is in space. It makes the feet talk up the legs to the hips, and the hands talk up the arms to the shoulders. This, in turn, encourages the hips to communicate to the shoulders via the spine and core. Everything in your body is talking, and the better the body is able to communicate, the better it's able to coordinate and function. Not to mention, keeping your muscles talking or working is keeping your blood and oxygen flowing, which means burning more calories.

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IT IS IN SPACE.**

Many people spend the majority of their workday seated, **HUNCHED OVER A COMPUTER, AND THEN GO SIT ON A MACHINE** when they work out.

Communication is closely related to the theme of consciousness in Animal Flow. It's common for people to be disconnected from their body unless they experience pain. Returning to our Beast example, the process of coordinating your hands and feet increases body awareness and stimulates cognitive brain function. You have to be focused and mindful about what you are doing. And you may just have a little fun in the process!

Finally, one of the key elements that makes Animal Flow so beneficial is variability.

Many of the movements are multi-planar and rotational. Many people spend the majority of their workday seated, hunched over a computer, and then go sit on a machine when they work out. And chances are that machine is going to have them moving in the exact same plane of motion (sagittal plane) that they sat in all day. Even if they are doing some free-motion exercises using dumbbells, barbells or even kettlebells, a lot of the movements are still in that same plane of motion. Being stuck in those same motions all day can easily lead to muscle imbalances, overuse and eventually injury. The human body needs to be strong and effective while moving in all directions.

Basically, you've got to break up your patterns, which is exactly what these Animal Flow movements do. Give them a shot using the examples provided, or try adding the individual pieces into your regular routine. There's no right or wrong—just get moving!



**A STUDY
PUBLISHED IN
THE JOURNAL
PROCEEDINGS OF
THE NATIONAL
ACADEMY OF
SCIENCES
REVEALED THAT A
HUMAN BIPEDAL
GAIT IS FOUR
TIMES MORE
ENERGY EFFICIENT
THAN A CHIMP'S
"KNUCKLE-
WALKING."**



ANIMAL FLOW BASIC MOVEMENTS

1. CRAB REACH

Begin in Crab position with the hips 1 inch from the ground, being sure that the fingers are pointing behind you. Bring the reaching arm up toward the face. Lock it in between the eyes. Push the hips up toward the sky as you push the heels down. Once you reach full extension at the hips, continue to follow the hand up and over with your eyes until you're looking down at the ground. The upper arm should be completely relaxed, framing the head.

2. FORWARD TRAVELING BEAST

Place the hands directly under the shoulders with straight elbows. Pull the knees just in front of the hips, underneath the belly button. Lift the knees 1 inch from the ground to set the Static Beast. Begin traveling by lifting the opposite hand and foot, then stride an equal distance and land at the same time. Be sure to keep the knees 1 inch from the ground the entire time, trying to minimize any lateral shift or rotation.



**DUE TO THE STRUCTURE
AND ALIGNMENT OF
THEIR LEGS, MOST CRAB
SPECIES CAN ONLY MOVE
SIDE TO SIDE. >>>**



THE BENEFITS OF ANIMAL FLOW include increased mobility, greater flexibility, enhanced stability, more power, longer endurance, advanced skills and improved neuromuscular communication.

**THE
"KINESTHETIC"
OR MOVEMENT
SENSE CAN
REFER EITHER TO
PROPRIOCEPTION
ALONE OR TO
THE BRAIN'S
INTEGRATION OF
PROPRIOCEPTIVE
AND VESTIBULAR
INPUTS.**

3. LATERAL TRAVELING APE

Start in a deep squat, making sure that the heels are touching the ground. Reach across the body, planting the hands to where the trailing hand is in front of the leading foot. Press down into the ground, shifting the legs sideways. The back foot always lands first. Be sure to bring the heels down and the eyes up to complete the rep.



4



**IT IS ESTIMATED THAT
ONE HOUR OF BREAKDANCING
BURNS BETWEEN 450 AND 600
CALORIES.**

4. UNDERSWITCH

The Underswitch is a transition used to switch from Crab to Beast or vice versa. It's important to note that the traveling leg will always pass underneath the body and never over. To start the movement, get set up in Static Beast or Crab. Lift one foot and the opposite hand from the ground, and rotate with the leg as it travels underneath the body, finishing in the opposite Animal form.

5. SIDE KICK THROUGH

Begin in Static Beast. You'll be kicking directly out to the sides or at a 90-degree angle from the Static Beast. To initiate the movement, lift the foot of the kicking leg and the opposite hand from the ground. Rotate with the kicking leg as it travels underneath the body. Once the leg passes underneath, begin to straighten the knee and point the toes. The elbow of the lifted hand pulls in the opposite direction of the kicking leg. In the end position, the hand should be by the face, with the palm facing away. **PT**

5





PALEOFITNESS

Maximize Your Performance



PaleoFitnessMag.com

“...a great resource for anyone looking to get in shape in a sustainable and enjoyable way!

“ This is a perfect compliment to our other Paleo resources. Long overdue.

“ The information is solid and seems pretty balanced to me... Everything advocated for is pretty accessible and sane for the average human. The recipes look pretty simple and delicious.



Leo Vassershteyn

BALANCING THINGS OUT

The life of a true Homo sapiens should be rich in movement volume, diversity and complexity. When it's not, things can get out of balance, and you can go from efficiency to dysfunction, to pain, and then to injury. Nature used to have a great check against this by requiring us to move a lot to stay alive. This allowed our movement patterns to mature fully, but also to diversify enough to not become overused. Sadly, modern life, even for those who are fairly active, is seriously lacking in all of those elements. In work, we overuse; in sports, we overtrain; and then we sit around and don't actually get enough rest. Our lives are out of balance, and our bodies are even more so.

The traditional approach to correcting asymmetries is to strengthen the weak muscles and stretch the tight ones.

I find this to be the equivalent of treating symptoms, and prefer to **ATTACK THE ROOT CAUSES, WHICH ARE THE MOVEMENT PATTERNS.**

Muscles become weak or tight for a reason: compensation. A good corrective exercise will expose your compensations and force you to overcome them in order to master the exercise. Master the exercise and you correct the pattern. Simple!

The windmill and the single-leg-single-arm deadlift are the most effective movements for correcting bilateral asymmetries. Both are traditional kettlebell exercises, but can be done with dumbbells, too. The reason these two moves are so effective is because they really expose the compensation patterns caused by functional asymmetry. You will find the side that requires holding the weight in your dominant hand will perform noticeably better than the non-dominant side. The goal is to train both sides in order to bridge the gap in performance.

If you don't notice a difference, then there is no problem. If you do, or you simply suck on both sides, then these are great exercises for you to start training and master!

Like most exercises I recommend, the goal is to be able to perform them with some decently heavy weight. You might notice that these moves resemble the warrior three and triangle poses from yoga, but they are very different. Having to negotiate an external load drastically changes the neuromuscular demands and the load on the spine.

To select a starting weight, pick one that you would have a hard time pressing over your head with one arm. For most people, this is usually between 20 and 40 pounds. You want it to be challenging, but not impossible. Once you've selected your weight, read the instructions and do a dry run first, without the weight.


SINGLE-LEG-SINGLE-ARM DEADLIFT

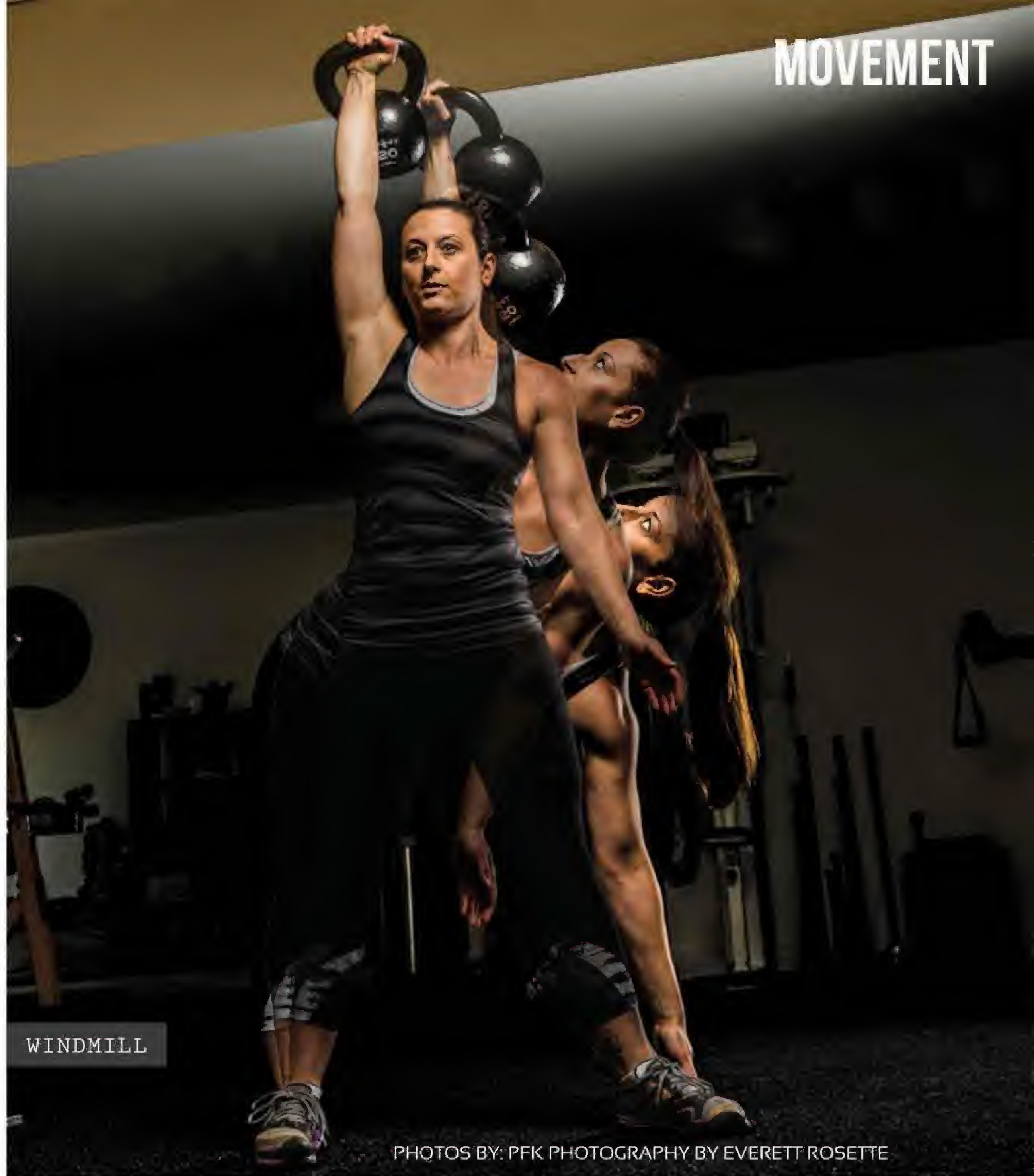
» SINGLE-LEG-SINGLE-ARM DEADLIFT

Single-leg deadlifts are more about stability than brute strength. I know plenty of strong boys who have been shown up by dainty ballerinas on this move. If you have a weak foot, poor balance, hip asymmetry and a rotational bias in your trunk, this move will expose it.

- 1 Assume a neutral standing position with your feet straight and place the kettlebell between your feet.
- 2 Initiate by lifting the right leg back, keeping the knee straight and the foot pointed straight.
- 3 As you lift the right leg, hinge forward with your left hip, inhaling on the way down.

- 4 Start to bend your left knee slightly as you hinge, keeping the shin vertical and the arch of the foot stable, and continue until you reach the kettlebell.
- 5 In the bottom position, your hips should be level with each other, with the trunk neutral and the shoulder girdle depressed. Your body should form a straight line, sloping up from your right foot to your shoulder.
- 6 Grab the kettlebell, lean back on your heel and stand up, driving from the left hip and maintaining your alignment and exhaling as you stand up. Think of your body as a rigid seesaw, with the hip as the pivot.
- 7 Squeeze the left glute and lock out the hip at the top.
- 8 Bring the kettlebell back down slowly, tap it lightly to the floor and repeat. Try to perform 10 to 15 repetitions, then switch sides.

 Remember to hold the weight in the opposite hand of the standing leg. If you're standing on your left leg, hold the weight with your right and vice versa. This requires the most contralateral stabilization.



WINDMILL

PHOTOS BY: PFK PHOTOGRAPHY BY EVERETT ROSETTE

» WINDMILL


Windmills deal more with mobility and stability asymmetries in the trunk and shoulders. This is an advanced kettlebell move, taught in the StrongFirst Level II certification, so don't feel like a failure if you have a hard time with it. You're only a failure if you give up.

- 1 Stand with your feet slightly more than shoulder-width apart, grab the kettlebell with your right hand, and lift or snatch the kettlebell into the overhead position.
- 2 Point both feet slightly to the left. It's okay if they point slightly away from each other, but no more than 20 degrees.
- 3 Keep your right arm locked out through the duration of your set. No bending the elbow!
- 4 Hinge your hips, bending to the left and pushing your hips to the right, while rotating your upper trunk to the right and

looking right at the kettlebell. Really focus on pushing your right hip out to the right.

- 5 As you come down, your right leg should stay straight and loaded, but the left leg can bend or stay straight, depending on your hamstring mobility. Don't bend the knee too much or your weight will shift, and you will lose stability and drop the weight.
- 6 Go as low as your hamstrings will permit, then pause, holding the tension. If you're flexible, you'll get to the bottom and touch the ground. If you're not, then it's okay to stop short and work on getting deeper each time. Do not flex-bend your spine just to reach the ground.
- 7 Stand back up, leading with your kettlebell, maintaining a stable line, then lock out your hips at the top and repeat.
- 8 Try to perform 10 to 15 reps on each side.

If you're right-side dominant, you'll have a much harder time rotating and not bending your spine when holding the weight in your left hand. You will also find that your right hamstring is tighter. Left-side-dominant people will experience the opposite. Remember that your trunk must rotate as you hinge, but your trunk cannot bend.

I realize there are many other exercises that address asymmetry issues, but these two are the most effective in my book. Turkish get-ups deserve an honorable mention, but they're more complex. Incorporate these moves into your workouts as part of your warm-up. If you can match both sides in weight, volume and movement symmetry, then you will do a lot to clear out the junk in your movement patterns and add some balance to your life. 

EVERYDAY FUNCTIONALITY: SQUATTING

Peter Hirsh



PHOTOS BY SARAH HAINES

SQUATTING IS ONE OF THE MOST PRIMAL MOVEMENTS FOR HUMANS. IT'S NECESSARY FOR EVERYDAY FUNCTIONALITY IN THE REAL WORLD WHEN PICKING THINGS UP AND PUTTING THEM DOWN, AND EVEN FOR SIMPLE BODY-WEIGHT MOVEMENTS LIKE STANDING FROM SITTING OR LYING DOWN.

In the past, squatting was a resting position, and even today, it's not uncommon to see people resting at the base of a squat while working in agriculture or making clothes and artwork, especially in less developed parts of the world where machines haven't taken over.

Unfortunately, though, many Westerners don't have the ability to squat in the same way that our ancestors could. This is a result of too much sitting, and sedentary lifestyles have made the muscles of our hips too tight to allow for the proper range of motion to move in this way.

In my experience, it's common to see people who can bend well but can't squat, and others who can squat but can't bend. Developing proper range of motion in your hips to allow you to do both is a great way to prevent back and joint pain as you get older. Performing these moves on a regular basis will also build leg and core strength that will help you do just about anything physical in your daily life.



TIPS ON PERFORMING A PERFECT SQUAT

- > Keep your back flat and only go as deep as your flexibility will allow without rounding. Tight glutes or hamstrings will limit your range of motion in the squat because they will cause your back to flex if you go too deep.
- > Make sure your feet are flat on the ground, and that your weight isn't on the outside or inside of your foot. Also make sure your feet are aligned with each other and not excessively externally rotated (pointing outward). Slight external rotation is fine (up to 13 degrees).
- > Your knees will drift forward, over your toes, but make sure they track your toes and don't move inward or outward.
- > Limit forward lean of your torso. You should be able to keep forward eye contact without extending your neck. While a certain amount of forward lean is expected, try to limit it to an angle no greater than that of your shin.
- > Start with no weight at all, and gradually add some weight held at shoulder level. You may notice the addition of weight helps to correct the movement, as it forces you to move properly in order to maintain efficiency.

HOW TO USE THE SQUAT IN YOUR WORKOUT

There are many ways to squat, so feel free to try different variations. This will help you to always see good results from your training. Squats demand a lot from your quads, core and glutes, so try not to fatigue these muscles with other exercises first. I definitely recommend not training abdominal isolation exercises beforehand, except as a light warm-up, as you will need that core stability to squat safely.



WORKOUT (WARM UP FIRST)

- 10 X GOBLETS, OR FRONT SQUATS (AS PICTURED; WEIGHT IN FRONT HELD WITH BOTH HANDS)
- 10 X BENT-OVER ROWS [2 SETS]
- 10 X BACK SQUATS (WEIGHT RESTING ON YOUR BACK, HELD WITH BOTH HANDS: BARBELL, SANDBAG, DUMBBELL OR KETTLEBELL)
- 10 X PUSH-UPS [2 SETS]
- 10 X RACK SQUATS (AS PICTURED; WEIGHT HELD IN FRONT IN ONE HAND AT SHOULDER LEVEL, AND SWITCH SIDES ON THE SECOND SET)
- 10 X PULL-UPS (USE ANY PULL-UP VARIATION THAT WORKS FOR YOU; ASSISTED PULL-UPS ARE JUST FINE) [2 SETS]
- 10 X OVERHEAD SQUATS (AS PICTURED; GO LIGHT AT FIRST AND PAY CLOSE ATTENTION TO YOUR TECHNIQUE)
- 10 X ONE-HANDED OVERHEAD PRESS (SWITCH HANDS ON THE SECOND SET; YOU CAN USE EITHER A DUMBBELL OR KETTLEBELL) [2 SETS]

Feel free to break this up into two workouts if you're not quite ready for all four rounds at once—you'll be very sore from all of the repetitions if you aren't careful. You may also notice that this workout gets your heart rate up very high because you are using large muscles that require a lot of oxygen. If you feel like you just went for a 10-mile run, you're probably doing just fine!

Practice your squats, and take your time to get them right. They aren't something that most people can just do without thinking, and will probably take a lot of focus and concentration. This workout will do it all: build strength, burn fat, develop flexibility and work every muscle in your body while expanding motor patterns that will help you in your daily life.

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